Encyclopedia of the Game Industry

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What is the *Encyclopedia of the Game Industry*?

The *Encyclopedia of the Game Industry* is a collaborative document produced as a class assignment in Dr. Laine Nooney's undergraduate course, Video Game Economies, taught in the Department of Media, Culture, and Communication at New York University (this course was titled Video Games: Culture and Industry until Spring 2020).

For the assignment, each student independently writes an encyclopedia entry on a topic related to the contemporary game industry—whether a company, concept, geographic region, business model, etc. The goal of the *Encyclopedia* is to produce a snapshot of the industry at the moment the course takes place (currently in the late 2010s and 2020s) as a public resource for historians in the future, stored on the Internet Archive.

The *Encyclopedia* is added to every semester, and students must choose new topics; revision of pre-existing entries has not yet been considered. Students are only marked by their initials and the year and semester they were enrolled in the course.

Style, focus, clarity, criticality, quality of citations, and even accuracy may vary from entry to entry, though only entries that received an 85 or higher are recorded in this document. [UPDATE: the minimum grade for inclusion was raised to an 88 starting Fall 2019]. References are provided for the purpose of verification of claims. Entries have not been edited after submission, except to correct glaring typographic, citation style, or structural errors.

This is an imperfect document. It should be both referenced and celebrated as such.

At the time this document was compiled, Dr. Laine Nooney is an Assistant Professor of Media and Information Industries in the Department of Media, Culture, and Communication at New York University. [UPDATE: Dr. Laine Nooney was promoted to Associate Professor in Spring 2024].

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3DM

Overview

3DM is a Chinese-language website featuring video game news, reviews, walkthroughs, mods, translations, and (before 2016) pirated games. Launched in 2001, 3DM claims to be the most popular video game website in China, with over 2 million users and 12 million views (3DMGAME n.d.). The website also holds a forum with over 12 million members and over 60 thousand daily posts.

3DM started as a hobbyist website, compensating its operating cost with paid downloads for cracked video games. In 2008, 3DM quickly expanded as forum members and posts surged, and more players volunteered in the localization, piracy, and walkthrough teams. In 2010, 3DM joined 178.com, a famous game vertical portal, transitioning into a corporate-ran game website based on an advertising business model (ChunTian 2010). Widely known as a video game piracy group, 3DM has stopped cracking games since 2016 following Koei Tecmo's request for cease-and-desist (Ashcraft 2017). After 2017, the company rebranded as a video game news site, publisher, digital distributor, and localization service provider.

Early History (2004-2007)

3DM started as a hobbyist video game website reposting cracked pornographic video games. Its predecessor, "3DHGAME" (3D *hentai* game), was founded by Gao Qingqing in 2001, offering download links and holding discussion forums for pornographic gal games (Yang Liu 2007). In 2004, Gao sold the 3DH to Liu Yan under the pressure of "Strike Hard," a series of massive anti-crime campaigns in response to the worsening social safety during the economic reform. After taking over 3DH, Liu and his girlfriend Su Feifei (under the pseudonym of *busi niao*, "phoenix") renamed the website 3DM (3D *meishaonu*, or "3-dimensional pretty girl"), expanding the scope of the website and the forum to all ACG (Anime, Comics, and Games) content.

While reposting pirated games from foreign websites, 3DM also started to localize and crack mainstream and adult games. In early 2007, the website reached over 100 thousand views per day (Yang Liu 2007). An early user of the website recounted that 3DM won great popularity among players with the cracking and localization of *Grand Theft Auto: San Andreas* (BB姬Studio 2017). Su and Liu compensated for the website's operating costs by offering paid downloads through a point system. In April 2007, Liu and Su were arrested and found guilty of "disseminating pornographic foreign games." While Su was imprisoned for six months, Liu stayed in jail for two years.

Professionalization and Corporate Transition (2008-2014)

After Su was released in late 2007, she legitimized the website by removing and prohibiting all pornographic content (newtype2001 2013). At this point, 3DM operated as a grassroots online community, relying on users' free labor to produce and repost content. In 2008, to compete with video game websites like Youxia and Gamersky, Su started to "professionalize" content production to achieve better quality. For instance, Su enlisted the localization and speedrunning

teams spontaneously formed on 3DM's forums, integrating them into the "3DM Forum Localization Team" and "3DM Speedrunning Team" ("关于3DM汉化组" n.d.; 半神巫妖 2012). Popular accounts characterize 2008 as a year of 3DM's high-speed growth and increasing online popularity. Early users argue that by providing high-quality localization and mandating posting to unlock game downloads, 3DM achieved a large user base and high user engagement (BB姬 Studio 2017; 刺猬公社 2018).

In May 2010, 3DM joined 178.com, a video game web portal founded in 2009 by Beijing Zhizhu Internet Technology Ltd. In exchange for a 5 million RMB investment, 3DM became the "single-player games" subdomain of 178.com. 3DM's technical and content team moved into Zhizhu's office, yielding legal, marketing, public relations, and other aspects of corporate management to 178.com. Su characterized this partnership as "seeking protection under Zhizhu due to the destructive competition with Youxia" (ChunTian 2010). Allegedly, Youxia implanted browser hijackers in their pirated games that redirect users from 3DM.com to pornographic websites, which made 3DM staff susceptible to police arrests (Tao 2010; S. Li 2012).

In November 2012, 3DM broke off from Zhizhu because it was "not satisfied with being a single-player game channel under 178.com and lack of substantive support from Zhizhu" ("3DM同178分手" 2012). Soon, Beijing Sandingmeng Software Service Co., Ltd. was founded. While Liu and Su remained as the administrators and owned part of the company, the majority shareholder was a web game developer called Shanghai Tianyou Software Service Co., Ltd. From March to April 2014, Su said she refused acquisitions from Tencent and Perfect World, two of the largest game publishers in China ("腾讯解封3DM" 2013; Huayuan 2014). The majority share was then sold to Jiangsu Phoenix Publishing & Media Co., Ltd., a major book publishing company that was expanding to game publishing ("凤凰传媒" 2017).

As 3DM transitioned from a leisure community to a corporate-run website, its business model shifted from paid downloads to advertisements, which are embedded in its website and pirated game installers and launchers (Haozhu 2016). By offering cracked and localized games, 3DM attracts user attention and brokers them to advertisers for profit.

PC and Piracy Game Culture (2004-2016)

While 3DM was characterized as a video game piracy group in most English sources (Ashcraft 2017; Plunkett 2016; Maxwell 2016), it is unclear how extensively 3DM was producing cracked games on its own. Memoirs of early participants and users indicate most cracked games were reposted from foreign websites, while 3DM localized and packed them into "integrated versions" (Banshenwuyao 2011; T. Li 2016; Wu 2016).

On April 1, 2016, 3DM publicly announced that it successfully cracked Denuvo, the anti-temper and digital rights management system that other piracy groups deemed impossible to crack. This won 3DM global renown as users from Korea, Russia, and the US flooded into the website (T. Li 2016). A member of the 3DM cracking team attributed this success to the profit-driven nature of game piracy on 3DM in contrast with hobbyist piracy groups (T. Li 2016).

With the console ban in China since 2000, 3DM, Youxia, and Gamersky's cracked and localized games were the only way gamers could access foreign games in mainland China. Still, the

production and reposting of pirated games has been controversial. 3DM was accused of stealing intellectual property rights and destroying the native game industry (BB姬Studio 2017; T. Li 2016; Wu 2016). In response, 3DM invoked the cultural protectionist discourse, refusing to crack domestically produced games while insisting on its role in fostering the single-player gaming scene in China (as opposed to more mainstream browser games and MMO games) (刺猬公社 2018).

As consumer awareness of buying "legal copy" (*zhengban*) games increased, competitors and lawsuits further undermined the market for pirated games. Consumers could purchase digital games on Stream with Alipay since 2011 (Ding 2017). After the video game console ban was lifted in 2015, foreign games could also enter the Chinese market. Game publishers like Blizzard, Ubisoft, and Koei Tecmo have been condemning 3DM for cracking their games since 2011 ("3DM创始人" 2012; "暴雪发函" 2011; Yongyin Liu 2017). In January 2016, Koei Tecmo sued 3DM for copyright infringement. The court ruled in favor of Koei Tecmo in 2017 and awarded 1.62 million RMB in damages (牛科技 2018).

Realizing the waning demand for piracy and the fact that the stigma of piracy overshadowed its other content, 3DM decided to phase out piracy and announced a corporate restructuring in early 2016. Since then, 3DM has been trying to transition into a domestic game publisher and digital distributor in addition to being a video game news site, forum, and localization service provider (Qu 2016; 刺猬公社 2018; 银河正义使者 2019; T. Li 2016). In 2019, 3DM was awarded "the most influential video game news media" of the year in Xinhuanet's "China Video Game Industry Convention" (Zhang 2019).

-Q.Y., Fall 2023

References

3DMGAME. n.d. "关于本站." Accessed October 10, 2023. https://www.3dmgame.com/s/about.html.

"3DM创始人反驳UBI指责其传播盗版." 2012. GameLook.Com.Cn. December 4, 2012. http://www.gamelook.com.cn/2012/12/102651.

"3DM同178分手 上海天游注资布局单机业务." 2012. 17173. November 19, 2012. http://news.17173.com/embed/final/kuai/#3106009_1_10009.

Ashcraft, Brian. 2017. "Tecmo Koei Defeats Major Chinese Piracy Group." Kotaku. November 15, 2017. https://kotaku.com/tecmo-koei-defeats-major-chinese-piracy-group-1820464639.

Banshenwuyao. 2011. "从某'私生子'看汉化——单机汉化10年发展变革_3DM单机." November 29, 2011. https://www.3dmgame.com/news/201111/36859_4.html.

BB姬Studio. 2017. "简单聊聊色情起家的三大妈." November 10, 2017. http://www.bilibili.com/read/cv64531.

ChunTian. 2010. "178游戏网500万投资游戏领域专业团队 3DM确定加盟_3DM单机." May 26, 2010. https://www.3dmgame.com/news/201005/16462.html.

Ding, Peng. 2017. "起底Steam在中国的发展，存在的隐患又是什么？." Sina.Com. September 29, 2017. https://tech.sina.cn/csj/2017-09-29/doc-ifymmiwm0899729.d.html.

Haozhu. 2016. "《艾希》破解风波：谈国内单机游戏网站转型之困." Netease. November 22, 2016. https://www.163.com/game/article/C6GJ8VQ700314V8J.html.

Huayuan. 2014. "不死鸟称3DM已经出售 买家或为完美世界." 17173. March 17, 2014. https://web.archive.org/web/20140317004646/http://news.17173.com/content/2014-03-13/20140313221322813.shtml.

Li, Songwei. 2012. "3DM负责人曝解散内幕：曾遭对手举报入狱半年." 腾讯网. September 30, 2012. https://web.archive.org/web/20120930004901/http://tech.qq.com/a/20100126/000241.htm.

Li, Teng. 2016. "中国盗版公司'从良'记." 中国新闻周刊. May 4, 2016. http://www.banyuetan.org/chcontent/zx/mtzd/201654/193381.shtml.

Liu, Yang. 2007. "网络不死鸟之死." 西安晚报. December 3, 2007. https://news.sina.com.cn/o/2007-12-03/173013012852s.shtml.

Liu, Yongyin. 2017. "结案信息 | 3DMGAME网站破解传播五款境外游戏软件被判侵权, 境外权利人获得赔偿." Weixin Official Accounts Platform. November 6, 2017. http://mp.weixin.qq.com/s?__biz=MzI3OTA3MjQ3Mw==&mid=2650267981&idx=3&sn=e3875d5a6884aa849f2d5b0101b6b0dd&chksm=f34e1afbc43993ed2c1729f2525d6136d633e5c1d630a7d512eab6a83f8aa99e32175f3f42e2#rd.

Maxwell, Andy. 2016. "Hang on.....3DM Now Suggest They've Cracked Denuvo." TorrentFreak. February 11, 2016. https://torrentfreak.com/hang-on-3dm-now-suggest-theyve-cracked-denuvo-160211/.

newtype2001. 2013. "不死鸟再发怀旧照片 回顾3DMGAME经历的巨大动荡_3DM单机." April 19, 2013. https://www.3dmgame.com/news/201304/2276308.html.

Plunkett, Luke. 2016. "One Of The World's Biggest PC Piracy Groups Is Quitting The Game." Kotaku. February 7, 2016. https://kotaku.com/one-of-the-worlds-biggest-pc-piracy-groups-is-quitting-1757670457.

Qu, Chang. 2016. "著名游戏破解网收律师函后'从良.'" 北京青年报. April 5, 2016. https://web.archive.org/web/20211212033542/http://epaper.ynet.com/images/2016-04/05/A06/bjqnb20160405A06.pdf.

Tao, Di. 2010. "游侠网屏蔽3DM手段升级 游戏启动时自动加入屏蔽代码_3DM单机." May 22, 2010. https://www.3dmgame.com/news/201005/16366.html.

Wu Yin. 2016. "讲个笑话：盗版游戏玩家举报正版游戏平台'侵权.'" 爱范儿. February 6, 2016. https://www.ifanr.com/618025.

Zhang, Jinxuan. 2019. "'传中华文化 承游戏之责'2019中国游戏盛典在京召开." ChinaDaily.Com.Cn. June 19, 2019. https://chuangxin.chinadaily.com.cn/a/201906/19/WS5d09e971a3108375f8f2b650.html.

"关于3DM汉化组_3DM汉化组招聘_3DM汉化." n.d. Accessed December 10, 2023. https://www.3dmgame.com/s/tl/about.html.

"凤凰传媒（601928）：主业稳定发展，转型值得期待." 2017. China Fortune Securities.

刺猬公社. 2018. "从高材生到粗鄙主播 3DM创始人为何不做盗版游戏了？." Sina.com. November 5, 2018. http://tech.sina.com.cn/csj/2018-11-05/doc-ihnknmqx0161123.shtml.

半神巫妖. 2012. "速攻速攻，路路畅通—3DM速攻组2012年招贤纳士." 3DM单机. January 1, 2012. https://www.3dmgame.com/news/201201/38800.html.

"暴雪发函 要求国内组织停止破解暗黑3." 2011. Tencent.Com. September 20, 2011. https://archive.ph/MsoNB.

牛科技. 2018. “3DM败诉赔偿162万，盗版游戏网站走入历史.” Sohu.Com. September 29, 2018. https://www.sohu.com/a/www.sohu.com/a/257020621_466942.

“腾讯解封3DM:拒投资遭封 舆论压力解禁_产业服务.” 2013. Sina.Com. April 8, 2013. https://games.sina.com.cn/y/n/2013-04-08/1044699335.shtml.

银河正义使者. 2019. “3DM游戏商城正式上线，钜惠到来_3DM专栏.” June 17, 2019. https://www.3dmgame.com/original/3741769.html.

11 Bit Studios

Overview

11 Bit Studios is an independent multi-platform video game developer and publisher based in Warsaw, Poland (*Who We Are, 2022)*. 11 Bit Studios is a publicly-traded company listed in the Polish Warsaw Stock Exchange (WSE). Originally, 11 Bit Studios was established as an independent development studio in 2009 by former CD Projekt and Metropolis developers. Today, 11 Bit Studios has released an array of successful premium indie titles, built its own third-party publishing operations, and is now pursuing its breakthrough in the AAA market (*Annual Report, 2022)*. Despite starting as a small studio consisting of only a few developers, 11 Bit Studios now employs over 200 people. 11 Bit Studios' mission is to provide meaningful entertainment through the development of impactful and thought-provoking releases (*Handrahan, 2016; About Us, 2022)*.

As a multi-platform developer and publisher, 11 Bit Studios releases titles for all popular major platforms including PC (Windows, Mac, Linux), consoles (Playstation, Xbox, Switch), and mobile (iOS, Android) (*Annual Report, 2022)*. Some of the company's most successful projects are *Frostpunk* (2018), *This War of Mine* (2014), and the *Anomaly* franchise. All of these games were initially released as PC titles and later offered on additional platforms (console and mobile). By doing so, 11 Bit Studios has managed to reach and attract a larger audience of players as well as to further monetize its titles over a longer period of time (*Key Strengths, 2022)*. In terms of financials, 11 Bit Studios generated PLN 70 million in revenue in 2021 (*Financial Highlights, 2022)*. When considering the first half of 2022, the company has generated PLN 45.8 million in revenue -a 28% increase over the respective period in 2021- placing it on track to report record revenue in 2022 (*Half-Year Report, 2022)*. As the company continues to grow, 11 Bit Studios aspires to transcend the indie market and establish itself as a AAA video game developer and publisher while maintaining its core philosophy of delivering meaningful entertainment (*Clayton 2019)*.

Company History

After leaving CD Projekt and Metropolis, 11 Bit Studios' founders aspired to pursue their ambitions as independent developers and founded 11 Bit Studios in December of 2009. They then started working on creating indie games that offered unique gameplay mechanics and were fun for both hardcore and casual gamers. The company's first title was *Anomaly: Warzone Earth* released in April 2011 *(Culture.pl, 2022)*. Aspiring to release a game that offered fresh and unique gameplay mechanics, *Anomaly* featured an inverse version of the popular tower defense formula where players were controlling the offenders rather than the defenders (*Dutta, 2022).* Upon commercial success of the first *Anomaly* game, 11 Bit Studios began to gradually consistently release new games. In doing so, the company has continuously increased the budgets allocated to the development of new games as well as the size of the development teams involved in those.

The release of *This War of Mine* in 2014 was a project that paved the way for 11 Bit Studios' future. *This War of Mine* placed players as a civilian in the midst of a warzone that highlighted

the horrors of war and civil collapse. The success of *This War of Mine,* which has since been added to school reading lists in Poland and received praise for its depiction of the atrocities of war, led 11 Bit Studios to formulate its philosophy and mission of creating meaningful and thought-provoking entertainment (*Dutta, 2022; Handrahan 2020; Blake 2020).* The company's latest proprietary title is *Frostpunk (2018),* a city-building survival game taking place during a worldwide volcanic winter in the 19th century. Having sold over 3 million copies, *Frostpunk* is 11 Bit Studios' most successful release to date. The success of *Frostpunk* and *This War of Mine* has consolidated 11 Bit Studios' position as one of the leading developers in the indie gaming market.

Publishing Division

In 2014, 11 Bit Studios began operating its own publishing division, which has since considerably helped the company further grow as well as diversify its business model and revenue streams (*Annual Report, 2022)*. Through the company's publishing division, 11 Bit Studios can effectively publish externally developed games by other studios. Since 2014, 11 Bit Studios has considerably grown its publishing division by consistently investing in it to release several externally-developed games such as *Children of Morta* (2019) and *Moonlighter* (2018) (*Handrahan, 2019)*. These games complement 11 Bit Studios' library of internally-developed releases and have considerably helped grow the company's market presence (*Annual Report, 2022)*. As a result of the company's consistent investment in its publishing division, the release of externally-developed titles has accounted for an increasing share of 11 Bit Studios' total revenue. Indicatively, revenue from the company's publishing division has accounted for approximately 39% of the company's total revenue in the first nine months of 2022 (*Quarterly Report, 2022)*. 11 Bit Studios is expected to further grow its publishing division over time to release bigger games and continue to offer high-quality games that are aligned with the company's vision and mission.

AAA Market Penetration

11 Bit Studios' long-term goal is to establish itself as an AAA game developer and publisher. To achieve this goal, 11 Bit Studios intends to consistently work on releasing bigger projects and continue to broaden its portfolio of externally developed titles through increased expenditure on its publishing division (*Yearly Investors Conference, 2022*). The company's ambitions to pursue its AAA breakthrough are reflected by 11 Bit Studios' increased budget allocations on upcoming project releases as well as by its consistent accelerated hiring over the past quarters.

As of 2022, 11 Bit Studios is internally developing three new proprietary titles while at the same time working on releasing four new games through its publishing division. In terms of the company's internally developed projects, 11 Bit Studios is currently working on the release of *Frostpunk 2*, *The Alters*, and an unrevealed game codenamed as *Project 8.* 11 Bit Studios has consistently been increasing its capital expenditure on developing games. Indicatively, the aggregate development budget for the company's upcoming proprietary titles is over PLN 110 million, whereas the development budget for *Frostpunk* was below PLN 10 million (*Quarterly Report, 2022).* Accordingly, the company has been steadily expanding its headcount and increasing the size of the teams involved in developing its upcoming releases. In the near future, the company aims to have three in-house development teams, each consisting of approximately 60 to 80 people, that can simultaneously work on the development of distinct projects (*Half-Year*

Report, 2022). In doing so, 11 Bit Studios aspires to release at least one proprietary title per year. Through consistent releases and growing investment in its operations, 11 Bit Studios hopes to achieve its long-term goals and eventually penetrate the AAA market (*The Company's Strong Fundamentals, 2022; 11 Bit is Investing More and More, 2022)*

Over the past quarters, 11 Bit Studios has also substantially increased its investment in its publishing division. From 2023 onwards, the company aspires to release three to four externally developed titles annually in addition to the release of its annual internally-developed title (*Yearly Investor Conference, 2022)*. To do so, 11 Bit Studios has invested over PLN 50 million in publishing four new games and intends to further sign two additional publishing agreements by the end of 2022. To compare, 11 Bit Studios had only invested approximately PLN 2 million in publishing each of Moonlighter and Children of Morta (*Quarterly Report, 2022)*. As of now, the company's upcoming games from its publishing division include *The Invincible* as well as three games code-named as *Vitriol, Ava,* and *Botin,* expected to be released by the end of 2023. Highlighting its aspirations to aggressively grow its publishing division and presence within the video games market, the company aims to invest PLN 65 million in signing three new titles in 2023 and aspires to allocate an additional PLN 80 million in publishing three more titles that it will sign in 2024 (*Yearly Investor Conference, 2022)*. The company's publishing operations are therefore expected to further support 11 Bit Studio's total revenue and help the company pursue its AAA breakthrough by exploring new promising growth opportunities in the future.

- L.T., Fall 2022

References

Blake, Vikki. "'This War Of Mine' Being Added To Polish High School Reading List." Gaming Bible. June 20, 2020. https://www.gamingbible.co.uk/news/games-this-war-of-mine-being-added-to-polish-high-school-reading-list-20200620.

Clayton, Natalie. "How 11 Bit Studios' Frostpunk is closing in on 1.5m sales." PC Games Insider. May 14, 2019. https://www.pcgamesinsider.biz/success-story/69009/how-11-bit-studios-frostpunk-is-closing-in-on-15m-sales/?fbclid=IwAR0VqIO1bfpO6pDq3C1AHaO8AoADbwzX4xHwJsDa30Z-jtouWGSc1mjcues.

Culture.pl. "11 Bit Studios." Culture.pl. Accessed December 9 2022. https://culture.pl/en/artist/11-bit-studios.

Dutta, Angshuman. '"We were seeking uniqueness from day one': Konrad Adamczewski discusses 11 bit studios' games, history, development, and philosophy." Sportskeeda. February 11, 2022. https://www.sportskeeda.com/esports/news-konrad-adamczewski-discusses-11-bit-studios-games-history.

Graft, Kris. "11 Bit makes moves to bring 'meaningful games' into AAA realm." Game Developer. August 26, 2021. https://www.gamedeveloper.com/business/11-bit-makes-moves-to-bring-meaningful-games-into-aaa-realm.

Handrahan, Matthew. "This War of Mine will be added to school reading list in Poland." GamesIndustry.biz. June 18, 2020. https://www.gamesindustry.biz/this-war-of-mine-will-be-added-to-polish-schools-reading-list.

Handrahan, Matthew. "We Know How to Talk about These Games. All We Need Are Talented Developers." GamesIndustry.biz. August 30, 2016. https://www.gamesindustry.biz/we-know-how-to-talk-about-these-games-all-we-need-are-talented-developers.

Handrahan, Matthew. "11 Bit Studios embraces 'limitless' potential as a publisher." GamesIndustry.biz. May 29, 2019. https://www.gamesindustry.biz/11-bit-studios-embraces-its-limitless-potential-as-a-publisher

11 Bit Studios. “About Us.” Accessed October 3, 2022. https://11bitstudios.com/about-us/.

11 Bit Studios. “Annual Report Of 11 Bit Studios S.A. For 2021.” March 24, 2022. https://ir.11bitstudios.com/wp-content/uploads/2022/04/Annual-Report-of-11-bit-studios-for-2021.pdf.

11 Bit Studios. “Financial Highlights - Yearly Financial Data.” Investor Relations. Accessed December 2, 2022. https://ir.11bitstudios.com/en/yearly-financial-data.

11 Bit Studios. “Half-Year Report of 11 Bit Studios S.A. For the Six Months Ended June 30th 2022.” Investor Relations. September 29, 2022. https://ir.11bitstudios.com/wp-content/uploads/2022/10/Semi-Annual-Report-of-11-bit-studios-for-H1-2022.pdf.

11 Bit Studios. “Key Strengths.” Investor Relations. Accessed October 3, 2022. https://ir.11bitstudios.com/en/key-strenghts.

11 Bit Studios. “Quarterly Report of 11 Bit Studios S.A. For the Six Months Ended September 30th 2022.” Investor Relations. November 17, 2022. https://ir.11bitstudios.com/wp-content/uploads/2022/11/Q1-Q3-2022-Quarterly-Report-for-11-bit-studios-S.A.pdf.

11 Bit Studios. “The Company’s strong fundamentals bode well for the future.” Investor Relations. March 24, 2022. https://ir.11bitstudios.com/en/news/the-companys-strong-fundamentals-bode-well-for-the-future.

11 Bit Studios. ““The Invincible” as a new title in the Company’s publishing portfolio.” Investor Relations. June 12, 2022. https://ir.11bitstudios.com/en/news/the-invincible-as-a-new-title-in-the-companys-publishing-portfolio.

11 Bit Studios. “Who We Are.” Investor Relations. Accessed October 3, 2022. https://ir.11bitstudios.com/en/who-we-are.

11 Bit Studios. “Yearly Investors Conference 2022.” Investor Relations. Accessed December 9, 2022. https://ir.11bitstudios.com/wp-content/uploads/2022/06/11-bit-studios-Investors-Conference-2022-presentation.pdf.

11 Bit Studios. “11 bit studios buy shares in Fool’s Theory.” Investor Relations. February 28, 2022. https://ir.11bitstudios.com/en/news/11-bit-studios-buy-shares-in-fools-theory.

11 Bit Studios. “11 bit studios is investing more and more.” Investor Relations. November 17, 2022. https://ir.11bitstudios.com/en/news/11-bit-studios-is-investing-more-and-more.

100 Thieves

100 Thieves, colloquially referred to as 100T, is an esports organization and lifestyle brand based in and operating out of Los Angeles, California. Officially founded on November 20, 2017, 100 Thieves has origins as far back as 2016–when a team competed in the Call of Duty World League under the 100 Thieves banner, but disbanded after just three months. 100 Thieves, similar to other esports organizations, is known for its rosters of professional esports players that compete in various games. It's also known for its apparel business and its roster of content creators. CEO and founder Matthew "Nadeshot" Haag holds ownership in the company alongside creators Jack "CourageJD" Dunlop and Rachell "Valkyrae" Hofstetter. Notable ownership stakes are also held by musician Drake, entertainment executive Scooter Braun, and Rocket Mortgage co-founder Dan Gilbert, among other firms and investors. (Peters 2021).

Founding and Funding

100 Thieves is inseparable from its owner, founder, and CEO Matthew "Nadeshot" Haag. Born and raised in Palo Hills, Illinois, Haag found initial success in Call of Duty esports, winning several awards and championships through his time. He officially retired from the game in 2015. During his time as a player, he amassed a large fanbase, ending his Call of Duty career with more than 1 million Twitch followers and 1.7 million YouTube subscribers, giving him the platform to launch 100 Thieves (Lingle 2015).

The company was launched alongside a $10 million seed funding round led by Dan Gilbert. Over the next 4 years, it continued to build capital through more funding rounds, including $25 million in Series A funding, $35 million in Series B funding, and $60 million in Series C funding. Investments came from figures such as the aforementioned Drake and Scooter Braun, along with various venture capital firms, such as Aglaé Ventures, a group backed by the co-founder of LVMH, the world's largest luxury fashion brand (Casey 2021). This gave 100 Thieves an estimated valuation of $460 million, along with an estimated revenue of $38 million, placing it as the 2nd most valuable esports organization in the industry, though it is not currently a profitable company (Knight 2022).

In line with the rest of the esports industry, 100 Thieves relies heavily on sponsorships to generate revenue. As of December 2022, the team is sponsored by Boston Beer Company through its brands Truly Seltzer and Twisted Tea Hard Iced Tea, AT&T, which funds 100T's VALORANT division, and Lexus, which sponsors the Lexus Content House that Haag, Hofstetter, Dunlop, and creator Brooke "BrookeAB" Ashley live and produce content in (Nicholson 2021). Additionally, 100 Thieves partnered with mobile payment service CashApp to build its headquarter compound in Los Angeles, dubbed the 100 Thieves Cash App Compound, though it's been reported the partnership was terminated in early 2022. This led to a series of lay-offs within the company (Weiss, Perelli, and Whateley 2022).

100 Thieves has also engaged in other business ventures in an attempt to diversify. Haag recently unveiled Juvee, an energy drink developed by the 100 Thieves staff (Hale 2022). It has also begun participating in M&A activity, acquiring gaming peripheral company Higround (Lee 2021). Finally, the company has begun development of an upcoming video game named *Project*

X, which is being designed with input from their professional players and creators (Thomas 2022).

Entertainment and Apparel

100 Thieves relies on various divisions to create revenue streams and generate attention to support the company. Company president John Robinson claims esports, apparel, and entertainment each make up roughly ⅓ of the company's revenue (Fitch 2021).

Within entertainment, 100 Thieves supports a roster of creators on platforms like Twitch, YouTube, and TikTok. These creators create content under the 100 Thieves banner for a salary incentive, along with other benefits including creator specific brand deals and a general larger brand awareness (Lee 2021). 100 Thieves has been accused of predatory practices towards their creators. Former member Erind "Froste" Puka, who was part of a content group named The Mob, claimed the company took 95% of The Mob's sponsorship income and were severely underpaid, yet required to live in and pay for an expensive house in LA. Haag pushed back against these claims, with other 100 Thieves creators coming to the organization's defense (Notis 2022).

The creator roster generates various genres of content. While most focus on gaming, there are also many who focus on lifestyle, sports, and variety, among other things. For example, while Twitch streamers Moe "Yassuo" Abdalrhmanand and Spencer "Hiko" Martin focus on high level League of Legends and Valorant gameplay respectively, content group 2Hype focuses on sports related content (Polhamus & Miceli 2022). Some of 100 Thieves' creators have also signed large exclusive streaming deals with YouTube, including Hofstetter and Dunlop (Irwin 2021).

Another stream of revenue for the company comes from the apparel business. Its business model resembles that of a streetwear brand, focusing on apparel releases with limited quantities and thriving off the quick sell-out time of the merchandise, also known as a drop model. The first drop came in early 2018, which introduced the drop model. Since then, it has continued to produce merchandise in this way (Webster 2019). It also introduced an always-available line of merch, dubbed the 'Foundations' line, which reportedly generated $2.5 million in its first month of being active (Fitch 2021).

100 Thieves has collaborated with various brands and IP through its apparel lines, including recent collaborations with anime titles *Attack on Titan* and *Jujutsu Kaisen* (Fairbrother 2022). A *Call of Duty: Warzone* collaboration also resulted in exclusive branded merchandise (Richman 2021), among others.

Competitive Teams

Similar to its peers in the esports market, 100 Thieves fields competitive rosters in various esports titles, beginning in League of Legends' North American league, LCS. 100T was accepted to the league for the 2018 season, which was the first season that used a buy-in franchise model, which required teams to buy a spot in the league (Erzberger 2017). The LCS team found early success and has since continued to be a top team in the league (Utama 2022).

100 Thieves also entered Call of Duty near the beginning of their lifespan, signing a roster for the 2018-2019 Call of Duty World League season, which was able to capture some success. With the announcement of the Call of Duty League in 2019, which also featured a buy-in franchise model, 100 Thieves opted not to field a roster. However the team re-entered the league in 2020 as the LA Thieves. Since then, the LA Thieves has seen various levels of success, culminating in a league championship in 2022 (Hale 2022).

The other notable esports roster 100 Thieves fields is in VALORANT. The team entered the game early into its lifespan, announcing an initial roster in June 2020. The roster found continued success in the game, winning the first regional major, VALORANT First Strike North America (Kotwani 2020), along with successfully qualifying for various international majors. It recently gained entry into the franchised Valorant Champions Tour Americas League, in which it will compete among other teams from both North and South America (Geddes 2022). 100 Thieves also fields rosters in Fortnite and Apex Legends, which have won championships in their respective games. It also previously held a roster in CSGO, which was released in 2020 (Wolf 2020).

-B.S. Fall 2022

References

Casey, Tim. 2021. “Esports Company 100 Thieves Raises $60 Million Series C Funding Round at $460 Million Valuation.” *Forbes*. Forbes Magazine. December 10. https://www.forbes.com/sites/timcasey/2021/12/02/esports-company-100-thieves-raises-60-million-series-c-funding-round-at-460-million-valuation/?sh=1976ec7730ed.

Erzberger, Tyler. 2017. “Warriors, Cavs and Rockets Officially Enter League of Legends.” *ESPN*. ESPN Internet Ventures. November 19. https://www.espn.com/esports/story/_/id/21475314/golden-state-warriors-cleveland-cavaliers-houston-rockets-officially-enter-league-legends-championship-series.

Fairbrother, Logan. 2022. “100 Thieves Presents 'Jujutsu Kaisen'-Themed Apparel Collection.” *Hypebeast*. Hypebeast. December 2. https://hypebeast.com/2022/12/100-thieves-jujutsu-kaisen-apparel-collection-release.

Fitch, Adam. “100 Thieves President Explains Why Making Profit Isn't Their Priority.” *Dexerto*, Dexerto, 17 Dec. 2021, https://www.dexerto.com/esports/100-thieves-president-john-robinson-business-profit-1723060/.

Geddes, George. “100 Thieves Set to Sign Former XSET Superstar to Kick off Its Valorant Offseason.” *Dot Esports*, Dot Esports, 27 Sept. 2022, https://dotesports.com/valorant/news/100-thieves-set-to-sign-former-xset-superstar-to-kick-off-its-valorant-offseason.

Geoff Weiss, Amanda Perelli. 2022. “100 Thieves Sought a Crypto Brand to Replace Cash App as Its Top Sponsor, but It Fell through and Contributed to Layoffs, According to Former Staffers.” *Business Insider*. Business Insider. Accessed December 7. https://www.businessinsider.com/100-thieves-cash-app-part-ways-leaving-esports-compound-sponsor-2022-11.

Goslin, Austen. 2018. “Team Liquid Wins 2018 NA LCS Finals for Second Time in a Row.” *The Rift Herald*. The Rift Herald. September 10. https://www.riftherald.com/2018/9/9/17839302/team-liquid-2018-na-lcs-finals-results.

Hale, James. 2022. “The Newest Creator Drink: Juvee, from Nadeshot and 100 Thieves.” *Tubefilter*. October 6. https://www.tubefilter.com/2022/10/05/the-newest-creator-drink-juvee-from-nadeshot-and-100-thieves/.

Knight, Brett. 2022. “The Most Valuable Esports Companies 2022.” *Forbes*. Forbes Magazine. September 15. https://www.forbes.com/sites/brettknight/2022/05/06/the-most-valuable-esports-companies-2022/.

Kotwani, Bharat. 2020. "100 Thieves Win Valorant First Strike Na: Results and Standings Inside." *TalkEsport*. December 7. https://www.talkesport.com/news/valorant/100-thieves-win-valorant-first-strike-na/.

Lee, Alexander. 2021. "How Esports Org 100 Thieves Will Boost Its M&A Strategy with $60M in Series C Funding." *Digiday*. December 7. https://digiday.com/marketing/how-esports-org-100-thieves-will-boost-its-ma-strategy-with-60m-in-series-c-funding/.

Lingle, Samuel. 2015. "Nadeshot Will Leave Optic, Karma Tapped as Replacement." *The Daily Dot*. April. https://web.archive.org/web/20150414020514/http://www.dailydot.com/esports/optic-gaming-karma-nadeshot/.

Nicholson, Jonno. 2021. "100 Thieves Announces Lexus Partnership." *Esports Insider*. July 26. https://esportsinsider.com/2021/07/100-thieves-lexus-partnership.

Notis, Ari. 2022. "The Big 100 Thieves Nadeshot Underpayment Allegations and Response, Explained." *Kotaku*. Kotaku. August 30. https://kotaku.com/froste-nadeshot-100-thieves-underpayment-classify-1849475045.

Peters, Jay. 2021. "Valkyrae and Courage Are Now Co-Owners of 100 Thieves." *The Verge*. The Verge. April 7. https://www.theverge.com/2021/4/7/22372759/valkyrae-courage-100-thieves-co-owners-nadeshot.

Polhamus, Blaine. 2022. "All 100 Thieves Streamers and Content Creators." *Dot Esports*. Dot Esports. November 23. https://dotesports.com/streaming/news/all-100-thieves-streamers-and-content-creators.

Thomas, Eleni. 2022. "100 Thieves Are Making a Video Game: Project X Developers, FPS Details, More." *Dexerto*. Dexerto. November 16. https://www.dexerto.com/gaming/100-thieves-video-game-project-x-1851249/.

Utama, Kenneth. 2022. "Worlds 2022 Outlook Series: 100 Thieves (LCS) Preview." *Upcomer*. Accessed December 7. https://upcomer.com/worlds-2022-outlook-series-100-thieves-lcs-preview.

Webster, Andrew. 2019. "How 100 Thieves Became the Supreme of e-Sports." *The Verge*. The Verge. September 5. https://www.theverge.com/2019/9/5/20849569/100-thieves-nadeshot-esports-supreme-drake.

Wolf, Jacob. 2020. "100 Thieves to No Longer Field CS:Go Roster." *ESPN*. ESPN Internet Ventures. October 12. https://www.espn.com/esports/story/_/id/30099693/100-thieves-no-longer-field-csgo-roster.

Accessibility in Gaming

Overview
The International Game Developers Association (IGDA) defines game accessibility as "the ability to play a game even when functioning under limiting conditions. Limiting conditions can be functional limitations, or disabilities — such as blindness, deafness, or mobility limitations." Making a game accessible means working to intentionally include as much of the audience as possible and empowering as many types of players as possible to have the experience of playing the game, especially players functioning under limiting conditions.

Accessibility vs. Difficulty
Making an accessible game is not synonymous with making an easy game, and the inclusion of an easy mode does not necessarily mean that a game is accessible. The primary goal of gaming is to present the player with a series of challenges and barriers, which they are guided in overcoming through mechanics and modes of gameplay. A game becomes inaccessible when there are unintentional barriers put in place by developers; that is, there are challenges that players face which were not designed to be challenging. Identifying and mitigating unintentional barriers is the purpose of playtesting, a process that has historically excluded players with disabilities. Thus, many games are inaccessible to people with disabilities because of unintentional barriers that were only identified post-release.

When players with disabilities call for more accessible games, they are not asking for an easier mode of gameplay; "easiness" is relative to each player's skill level. What players are requesting is the ability to customize their experience and adapt controls, mechanics, and expectations so that they can successfully meet the game's challenges. Players are not asking to remove the challenges - they are asking for ways to tailor the gaming experience to their specific human limitations so that they can rise to the game's challenges.

Some in the gaming community argue that the key to succeeding in difficult games is to "git gud" - that is, to practice until the player has a high skill level and can overcome the game's challenges through experience. However, this mentality does not excuse a lack of accessibility in a game; requiring patience and practice to succeed is different from excluding players who are unable to play the game due to limitations in their body. A player cannot practice and get better if they cannot control or understand the game. Thus, players with disabilities are not looking for "easier" games - they are looking for games with the option to accommodate their limiting conditions.

Players who require accessibility accommodations are not asking for a fundamentally different game or for developers to compromise their vision; they are asking for developers to keep their entire player base in mind while creating a game, which includes players with any number of different limitations. A game is not intended to be appreciated equally by everyone (not every player will enjoy every game) but every game is intended to be accessed by as many people as possible.

Modes of Accessibility

According to the Game Accessibility Guidelines, 20% of gamers have a disability of some kind. These disabilities can be visual, auditory, speech-prohibitive, cognitive, or restrictive of motor functions. To make a more accessible game, developers must consider reach, impact, and value - how many people will benefit, what difference will be made to those people, and what will it cost to implement these options.

Motor control accessibility is primarily related to controllers and mechanics; accommodations can include the option to remap the controller, adjust the sensitivity of controls, and limit or eliminate quick time events and button-mashing. Accessibility can also mean the inclusion of post-acceptance delays, skip mechanisms for precision timing requirements, and options to adjust game speed.

Cognitive accessibility caters to challenges in information processing and how players understand the game; these accommodations can include options to disable blood and gore, repeat instructions and narrative text, and change text color and size. Making a cognitively accessible game can also mean creating reminders of controls during gameplay, avoiding flickering images and repetitive patterns, and allowing players to progress through text prompts at their own pace.

Visual accessibility assists players with limited or altered vision. Accommodations include ensuring no vital information is displayed by color alone, using surround sound, and providing an option to adjust contrast. Modifications can also include screenreader compatibility, the option to turn off background animation, and the inclusion of a voiced GPS.

Hearing accessibility impacts those with audio reception and processing difficulties; accommodations include the use of symbol-based chat, stereo/mono toggles, and separate volume controls or mutes for effects, speech, and background/music. Players can also be helped by limiting the use of background noise during speech, providing visual means of communication during multiplayer, and allowing players to indicate their preference for playing in multiplayer without voice chat.

Speech accessibility is for players who cannot speak or who have limited speech capacity. Accommodations for these players includes never requiring speech input for game progression, the use of text chat as well as audio chat in multiplayer games, and basing speech recognition on individual words from a small vocabulary (eg. ‘yes’ ‘no’ ‘open’) instead of long phrases or multi-syllable words.

Other accessibility measures may be taken to ensure that all players can participate in a game; these include requesting accessibility feedback, including every relevant area of impairment amongst playtesting participants, and providing a manual or autosave feature. Accessibility can also be achieved by allowing a preference to be set for playing online multiplayer with/without others who are using accessibility features that could give a competitive advantage to encourage fair gameplay.

A11y and Impact

"A11y" is the numeronyn for "accessibility;" the 11 stands for the number of letters which have been eliminated in the abbreviation. Game developers and enthusiasts have begun to meet for "a11y game jams," where people create and modify games with the express purpose of making them more accessible and sharing them with the community of players with disabilities. EA Games has an accessibility portal for their Sports games (NHL, EA Sports UFC, and Madden NFL). There was a chain of game developers tweeting "accessibility has never and will never be a compromise to my vision" which included several hundred industry professionals expressing a commitment to game accessibility.

Many games include accessibility accommodations without naming them as such; 60% of gamers play using subtitles despite the majority of players not having a disability. The Racing Auditory Display (RAD), which allows players to navigate racing games through auditory information alone (allowing d/Deaf players to engage), has proven to improve the lap times of hearing players as well. Accessibility accommodations are slowly becoming more prevalent in games, creating a positive impact on all players, regardless of disability status. Accessibility inclusion does not require a change to a game's vision or impact, but it does allow players to better control and customize their game experience to interact fully with a game. Ultimately, this means that more gamers can play and the game can have a further reach and impact in the gaming community.

-D.N.A., Spring 2019

References

"Accessibility Jam." Game Jolt, Game Jolt Jams. https://jams.gamejolt.io/accessibilityjam

Barlog, Cory (@CoryBarlog). "Accessibility never has and never will be a compromise to my vision." *Twitter*. 7 April 2019, 2:47am, https://twitter.com/corybarlog/status/1114781813296259072

Electronic Arts. "Accessibility At EA - An Official EA Site." Electronic Arts Inc., Electronic Arts, 27 June 2018. www.ea.com/able

Evarts, Holly. "For Blind Gamers, Equal Access to Racing Video Games." Columbia Engineering, The Fu Foundation School of Engineering and Applied Science, 6 Mar. 2018. https://engineering.columbia.edu/press-releases/rad-blind-video-games

"Game Accessibility Guidelines." Game Accessibility Guidelines, Game Accessibility Guidelines. https://gameaccessibilityguidelines.com/full-list/

Garcia, Elizabeth. "How I Game While Disabled." But Why Tho?, But Why Tho LLC, 19 Nov. 2018. https://butwhythopodcast.com/2018/11/19/how-i-game-while-disabled/

Garcia, Elizabeth. "REVIEW: Is the Hori Mini Wired PS4 Gamepad Accessible?" Geeks WorldWide, Geeks WorldWide, 25 Aug. 2018. https://thegww.com/review-is-the-hori-mini-wired-ps4-gamepad-accessible/

Gilbert, Daniel. "Accessibility Beyond The Trend." Podcast. Episode 1 – Inside Gaming Sekiro Response. But Why Tho LLC, 19 April, 2019. https://butwhythopodcast.com/2019/04/11/accessibility-beyond-the-trend-episode-1-inside-gaming-sekiro-response/

Thompson, Cherry. "Sekiro: Accessibility in Games Is About Far More than 'Difficulty'." IGN, Ziff Davis, LLC, 5 Apr. 2019, www.ign.com/articles/2019/04/05/sekiro-accessibility-in-games-is-about-far-more-than-difficulty.

Westin, Thomas, et al. "Accessibility in Games: Motivations and Approaches." International Game Developers Association, 29 June 2004. https://gasig.files.wordpress.com/2011/10/igda_accessibility_whitepaper.pdf

Activision, Esports, Call of Duty League

Overview

The Call of Duty League, or CDL, is a professional esports league centered around the first-person shooter game *Call of Duty*, designed to rival that of other premiere esport leagues and tradition sports league like the National Football League and National Basketball Association. The CDL is organized and produced by Activision, developer and publisher of the most recent Call of Duty title, *Call of Duty: Modern Warfare*, under the umbrella of parent company Activision Blizzard (Wolf 2019). *Call of Duty: Modern Warfare* was the best-selling game of 2019, earing more than $600 million in sales during release weekend (Webb 2020). The league "features the best Call of Duty esport players from around the globe," (Activison Blizzard n.d.). Previous professional Call of Duty leagues, like the CoD World League, featured teams from gaming organizations like 100 Thieves, FaZe Clan, Luminosity Gaming, and Evil Geniuses, but the revamped CDL opted to go in a different direction. Like Overwatch League, which is also produced by Activision Blizzard, the CDL is a geolocated franchise league. Each team was franchised by Activision Blizzard for $25 million apiece (Wolf 2019).

Structure

The Call of Duty League is made up of three tiers, involving professional players, fans, and amateurs. The Call of Duty League is made up of twelve professional teams, 11 in North America and one in Europe (Activison Blizzard n.d.), though it plans to eventually expand to 28 city-based teams (Lewis 2019), each competing for the Call of Duty League Championship and a prize pool of $6 million (Reuters 2019). League events are hosted by teams in their respective home markets, with eight teams competing in each event in three different objective based game modes: Search & Destroy, Hardpoint, and Domination (Activison Blizzard n.d.). Teams earn "CDL Points" with every win at an event as well as overall tournament standing. These points determine which teams qualify for the CDL Playoffs (Call of Duty League 2020). The second tier, Call of Duty Challengers, serves as the official path to pro system for amateur players. Players can compete in both online and LAN events to gain points to climb the open ladder towards a spot in the official CDL (Activison Blizzard n.d.). The third and final tier is the Call of Duty League City Circuit. Fans, in teams of two, compete in a game mode known as "Gunfight" at each CDL team's home event. Each CDL team selects one duo to compete on behalf of the team to represent the city during CDL Championship Weekend (Activison Blizzard n.d.).

Finances

Each team in the Call of Duty League were franchised for a minimum of $25 million. Teams are composed of a general manager and between seven to ten salaried players. Players are signed to a "standard contract" with a minimum salary of $50,000 (Lewis 2019). However, James "Clayster" Eubanks said in a Reddit thread that "top players are around $200 thousand to $400 thousand a year. Some franchises 'lowballed' their players and are between $125-200 thousand. Substitutes are mostly on minimums and benefits," (Reddit n.d.). Clayster's claims have not been substantiated by the League, however. Salaries are played directly by the team. While the Call of Duty League has no salary limit, it does use a "competitive tax balance" where if a team's payroll exceeds $1.575 million, the amount over the limit is divided up and distributed to the

other eleven teams (Lewis 2019). A minimum of 50% of all prize money goes to team players (Wolf 2019). Activision Blizzard and Google agreed to a multi-year partnership on January 24, 2020, the day that the Call of Duty League kicked off in Minneapolis, Minnesota (Petrosyan 2020). The deal gave YouTube the exclusive rights to broadcast the Call of Duty League, as well as the Overwatch League, which had just concluded its two-year contract with popular streaming service Twitch. The deal is reported to be for two years for a price of $90 million (De Vynck 2020). Within *Call of Duty: Modern Warfare*, fans can purchase cosmetic pack to support their favorite CDL team, which comes with a home and away skin, weapon camo, gun charm, and more, allowing fans to rep their team in-game. These packs cost $9.99 a piece.

Comparison to Overwatch League

While professional Call of Duty leagues existed in the past and the *Call of Duty* franchise is the most successful created in the United States, the competitive side did not stack up to that its competitors. Overwatch League paved the way for the modern Call of Duty League. Overwatch League, which was started in 2018 and centers around Blizzard's hit team-based first person shooter Overwatch, was the first major geolocated franchise esports league (Blizzard Entertainment n.d.). Teams were franchised for a price of $20 million for the inaugural season and $50 million for its sophomore season (Palmeri 2018). Like the CDL, Overwatch League is transcontinental, with 13 teams located in North America, five in Asia, and two in Europe. Teams play 28 regular-season matches, and the top six teams play in the Grand Finals at the end of the year for the title of Overwatch League champion. Teams compete for a prize pool of $5 million. The season also consists of an all-star game and midseason tournament halfway through the season (Blizzard Entertainment n.d.). Players are guaranteed a minimum $50,000 salary, healthcare, a retirement plan, and team housing (Webb 2018). Overwatch League is broadcast in French, Korean, and English, while the CDL is exclusively broadcast in English. According to Activision Blizzard, "the season one finals brought in 10.8 million viewers across Twitch, ABC, ESPN, and Disney XD," (Webb 2018). Activision Blizzard saw the success of Overwatch League and is actively trying to replicate it with the Call of Duty League.

Reception

The Call of Duty League has been more successful in terms of viewership than the Call of Duty World League was, but it still trails behind Overwatch League. The CDL Launch Weekend took place January 24-26, 2020, and the broadcast received over two million views and peaked in viewership at over 102,000 concurrent spectators. In comparison, Stage One of the 2018 World League peaked at 86,000 concurrent viewers and received over three million total views, while Stage One of the Overwatch League's inaugural season garnered over 18 million views and peaked at over 437,000 spectators (Yakimenko 2020). The large disparity between viewership numbers between the CDL and Overwatch League is because a majority of Call of Duty fans are American while Overwatch has a more global fanbase. Viewership has fluctuated greatly, dropping as low as 539,000 total views and as high as over 2.3 million (Santana 2020).

Impact of COVID-19

Due to the spread of coronavirus throughout the world, the Call of Duty League announced on March 12, 2020, that all competitions for the remainder of its inaugural season would be held online, with the first being held April 10. Activision Blizzard created servers dedicated solely for

CDL use to improve player connection. Viewership declined as competition moved online, and teams will miss out on merchandise and ticket sales for their homestands. Mike Rufail, owner and CEO of Dallas Empire said, “We came up with creative ways for sponsors to know we are still supporting their brand in a big way and that they are getting a good amount of advertising.” A majority of advertising efforts have been moved to social media, while players still adorn jerseys highlighted by sponsor patches while competing from their homes, seen via webcam (Santana 2020).

-J.M., Spring 2020

References

Activison Blizzard. n.d. *About the Call of Duty League.* Accessed May 13, 2020. https://callofdutyleague.com/en-us/about.

Blizzard Entertainment. n.d. *WHAT IS THE OVERWATCH LEAGUE?* Accessed May 14, 2020. https://overwatchleague.com/en-us/about.

Call of Duty League. 2020. *Call of Duty League 101: Learn About the League.* January 30. Accessed May 13, 2020. https://www.youtube.com/watch?time_continue=54&v=-9HbnNkd_0w&feature=emb_logo.

De Vynck, Gerrit. 2020. *YouTube Gets Streaming Rights to Major Esports Leagues.* January 24. Accessed May 13, 2020. https://www.bloomberg.com/news/articles/2020-01-24/youtube-gets-streaming-rights-to-major-e-sports-leagues.

Lewis, Richard. 2019. *Leaked Call of Duty franchise league deck reveals minimum salaries, team sizes, expansion plans.* August 18. Accessed May 13, 2020. https://www.dexerto.com/call-of-duty/leaked-deck-reveals-new-details-of-upcoming-call-of-duty-franchise-league-926192.

Palmeri, Christopher. 2018. *To Fight Fortnite, Activision Is Retooling How Its Games Work.* May 3. Accessed May 14, 2020. https://www.bloomberg.com/news/articles/2018-05-03/activision-gives-tepid-earnings-outlook-as-fortnite-threat-looms.

Petrosyan, Albert. 2020. *CDL and OWL to stream exclusively on YouTube Gaming.* January 24. Accessed May 13, 2020. https://www.dexerto.com/call-of-duty/cdl-and-owl-to-stream-exclusively-on-youtube-gaming-1318143.

Reddit. n.d. *Who are the top 5 highest paid players in the CDL? How much do they make a year?* Accessed May 13, 2020. https://www.reddit.com/r/CoDCompetitive/comments/e868m4/who_are_the_top_5_highest_paid_players_in_the_cdl/.

Reuters. 2019. *Call of Duty League teams, $6 million prize pool announced.* October 9. Accessed May 13, 2020. https://www.reuters.com/article/us-esports-callofduty-codl-2020/call-of-duty-league-teams-6-million-prize-pool-announced-idUSKBN1WO207.

Santana, Danni. 2020. *Call of Duty Teams Embrace Online Play Until Return to Live Audiences.* May 1. Accessed May 13, 2020. https://frntofficesport.com/call-of-duty-league-online-play-coronavirus/.

Stedman, Alex. 2019. *Call of Duty League Commissioner on Why It’s Time for a Franchise Model.* October 18. Accessed May 13, 2020. https://variety.com/2019/digital/news/call-of-duty-league-activision-blizzard-johanna-faries-1203374582/.

Webb, Kevin. 2020. *12 teams reportedly paid $25 million each to join a new esports league that starts today — here's everything you need to know about Call of Duty League.* January 24. Accessed May 13, 2020. https://www.businessinsider.com/call-of-duty-league-teams-schedule-salary-rules-format-2019-11.

—. 2018. *Eight teams paid more than $30 million each to join the Overwatch League – here's everything you need to know before the new season starts.* December 29. Accessed May 14, 2020. https://www.businessinsider.com/overwatch-league-season-2-2018-9.

Wolf, Jacob. 2019. *Activison Blizzard Announces Layoffs, Call of Duty League Geolocation.* February 2. Accessed May 13, 2020. https://www.espn.com/esports/story/_/id/25982427/activision-blizzard-announces-layoffs-call-duty-league-geolocation.

—. 2019. *Sources: Call of Duty franchise spots to sell at $25 million per team.* March 13. Accessed May 13, 2020. https://www.espn.com/esports/story/_/id/26249076/call-duty-franchise-spots-sell-25-million-per-team.

Yakimenko, Sergey. 2020. *The concluding remarks on the Call of Duty League Launch Weekend.* February 5. Accessed May 13, 2020. https://escharts.com/blog/launch-weekend-call-duty-league.

Adult Swim Games

Overview

Based out of Atlanta, Adult Swim Games is an American video game publisher, producer, and developer. It is the digital games branch of Adult Swim, the adult-oriented subdivision of cable channel Cartoon Network. Business began in 2005 when it collaborated with Midway Games to develop a handful of games based on the network's existing television shows. Since then, Adult Swim Games has been involved with over 200 games across PC, console, web, mobile, and virtual reality. The company has earned multiple top rankings in the App Store, a finalist position for the Grand Prize at the Independent Games Festival, and an Emmy nomination for *Rick and Morty: Virtual Rick-ality* (About Adult Swim). Adult Swim Games benefits from its television programming's vibrant designs and distinct humor.

Establishment

Adult Swim Games stems from a long line of entertainment corporations. In 1989, mass media company Time Inc. and Warner Communications merged to form TimeWarner. One of the company's major properties, Cartoon Network, was launched in 1992 as a channel dedicated to animated children's shows. Turner Broadcasting System joined the TimeWarner family shortly after in 1996. Adult Swim was launched in 2001 under Warner Bros. Entertainment as alternative programming to Cartoon Network's daytime slot. That same year, Cartoon Interactive Group, Inc. was founded in Atlanta, GA under Turner Broadcasting, both of which started operating as video game publishers. In 2005, Adult Swim Games began functioning mainly as a source of intellectual property (IP) for studios to create video games about, while also starting to co-develop. Now, Adult Swim Games is primarily a video games publisher alongside its parents and partners Turner Broadcasting System and Cartoon Interactive Group.

Published Games

Branching off from its foundational television programming, Adult Swim Games released its first two properties *Aqua Teen Hunger Force Zombie Ninja Pro-Am* and *Harvey Birdman: Attorney at Law* in 2007 and 2008 respectively, on consoles such as PlayStation 2 and Wii. Despite the popularity of the source material, the games received lukewarm reviews at best. The company's first hit came in 2010 with the release of endless running game *Robot Unicorn Attack* on iOS and online via Flash. The quirky title proved to be incredibly popular, accumulating over 150 million plays online and through Facebook in a little over a year, not to mention the innumerable downloads of the game in app form (Steinberg). Capitalizing on this success, Adult Swim Games released the game for Android the following year and doubled down on mobile games (Steinberg). In addition to a sequel and a third release, *Robot Unicorn Attack* had several iterations: *Heavy Metal*, *Christmas Edition*, *Evolution*, and *Retro*. The game was originally free-to-play, but the theme song "Always" by British band Erasure was under copyright and required

an additional purchase of $0.99 in the second installment and onward. In-game currency could be collected or bought with real money, and provided access to skins for the title character and different songs to underscore the playing experience (Webster).

In the two years succeeding the original *Robot Unicorn Attack*, Adult Swim Games did not achieve their ambitious proposition of releasing a mobile game per month, but the company did develop and publish multiple mobile games (Parnett-Dwyer). Matching and puzzle games *Monsters Ate My Condo* and *Snoticles* came out in 2011, and *Girls Like Robots* and *Super Mole Escape* in 2012 added another puzzle game and an endless runner to the canon. Theses games received favorable reviews and helped build the company's presence and brand. Though it had found its stride in mobile gaming, Adult Swim Games chose to shift its platform of choice.

Adult Swim Games opened its virtual storefront on Steam in 2013. The digital distributor caters to a number of platforms, including Windows, macOS, Linux, mobile, and PlayStation 3, although it is mainly concentrated on the expansive PC gaming market. In addition to Steam-connected platforms, Adult Swim made its games accessible to newer PlayStation models, Xbox One, Ouya, Wii U, and the Switch. From 2013 through present day, Adult Swim Games has steadily published games on Steam and supplementary platforms. Titles include *Volgarr the Viking*, *Duck Game*, *Westerado: Double Barreled*, *Small Radios Big Televisions*, *Glittermitten Glove*, *Battle Chef Brigade*, *Pool Panic*, and the upcoming *Samurai Jack: Battle Through Time* to name a few. During this surge of Steam content, Adult Swim Games released only a handful of mobile and console-exclusive games.

Notably, the company delved into one of its most popular pieces of IP. *Rick and Morty* premiered on Adult Swim in December 2013. Its popularity led to the creation of show-related content, including a point-and-click web browser game and a mobile game published within the following year. An app game similar to *Pokémon*, 2016's mobile *Pocket Mortys*proved to be far more memorable than the previous two games. Despite mixed critical reception, *Pocket Mortys* was a commercial success, paving the way for Adult Swim Games' most ambitious venture yet, 2017's *Rick and Morty: Virtual Rick-ality*. The VR game garnered mostly positive reviews and multiple award nominations, including an Emmy Nomination for "Outstanding Creative Achievement in Interactive Media Within a Scripted Program" (Graham).

Trademark Style

Adult Swim Games' strength comes from a definitive style established by its adult animated television shows: wacky, dark, self-referential, and bawdy humor, and punchy colors and designs set against the macabre and downright strange. When the company entered a partnership with developer and publisher Midway Games, it hadn't quite figured out how to translate that infamous aesthetic to another medium. In the case of their *Aqua Teen Hunger Force* collaboration, players and reviewers alike felt that the game emulated the show in that its

mechanics and gameplay felt like a practical joke (Bishop). The faults therefore fell more heavily on Midway's shoulders. Adult Swim Games faired only slightly better with their second game, based on the show *Harvey Birdman*. In 2011, Vice President of Adult Swim Digital and Games Jeff Olsen said he believed license games didn't do as well with audiences because "you're probably shutting more people out than letting them in," while "the audience for a casual game based completely on original intellectual property… is almost unlimited" (Sliwinski and Parnett-Dwyer). The next step for the company was to release "truly original titles for iPhone and other mobile platforms" in place of online games (Sliwinski).

Robot Unicorn Attack embodied Olsen's goal and became Adult Swim Games' first standout title. The gameplay itself was nothing new, but the bright, Lisa Frank-esque rainbows and fairies, and even the mythical/science fictional central character were novel and eye-catching (Parnett-Dwyer). This colorful scene was abruptly interrupted if your robot unicorn crashed into anything, in which case the character was essentially decapitated. However, this horrid end was not necessarily a drawback, but a contrasting feature crucial to the Adult Swim aesthetic. Adult Swim's games have been successful when they draw upon the core characteristics ever-present in the company's shows. Games like *Robot Unicorn Attack* and *Pocket Mortys* succeeded in casually parodying others while retaining their individuality and still being enjoyable to play (Gurney). For *Virtual Rick-ality*, co-creator, writer, and voice actor Justin Roiland led development with partiality toward the show's signature abrasive, meta, and immature humor, while also prioritizing innovation in the field of VR gaming (Davison). This continuation of Adult Swim's television creed into the games industry strengthens the brand of the company as a whole. In turn, consumers care less about whether a particular game comes from existing IP or not, and more about Adult Swim Games remaining distinct, consistent, and entertaining in their products.

-R.C., Spring 2020

References

"About Adult Swim Games." Adult Swim.chttps://www.adultswim.com/games/about.

Bishop, Sam. "Aqua Teen Hunger Force Zombie Ninja Pro-Am Review." IGN. IGN, November 7, 2007. https://www.ign.com/articles/2007/11/08/aqua-teen-hunger-force-zombie-ninja-pro-am-review.

Davison, John. "'Rick & Morty' Creator's Quest to Make VR Games Funny." *Rolling Stone*, September 13, 2016. https://www.rollingstone.com/culture/culture-news/rick-morty-creators-quest-to-make-vr-games-funny-101966/

Graham, Peter. "Owlchemy Labs' Rick and Morty: Virtual Rick-Ality Nominated for an Emmy." VRFocus, July 16, 2018. https://www.vrfocus.com/2018/07/owlchemy-labs-rick-and-morty-virtual-rick-ality-nominated-for-an-emmy/

Gurney, David, and Matthew Thomas Payne. “Parody as Brand: The Case of [Adult Swim]'s Paracasual Advergames.” *Convergence: The International Journal of Research into New Media Technologies*22, no. 2 (September 5, 2014): 177–98. https://doi.org/10.1177/1354856514546097.

Parnett-Dwyer, Michelle. “Adult Swim Video Games.” Adult Swim Video Games | The Strong, May 20, 2011. https://www.museumofplay.org/blog/chegheads/2011/05/adult-swim-video-games.

Sliwinski, Alexander. “Adult Swim Games Planning Slate of Original Mobile Titles.” Engadget, April 18, 2011. https://www.engadget.com/2011-04-18-adult-swim-games-planning-slate-of-original-mobile-titles.html.

Steinberg, Scott. “Adult Swim Cartoon Video Games Coming for IPhone, Android, Mobile.” *Rolling Stone*, May 2, 2011. https://www.rollingstone.com/culture/culture-news/adult-swim-cartoon-video-games-coming-for-iphone-android-mobile-242387/.

Webster, Andrew. “Play This: 'Robot Unicorn Attack 2' Is an IOS Runner with Space Whales and Corey Hart.” The Verge, April 25, 2013. https://www.theverge.com/2013/4/25/4265066/play-this-robot-unicorn-attack-2-iphone-ipad.

Akili Interactive

Overview

Akili Interactive is a Boston, Massachusetts–based digital therapeutics company with an additional office in Larkspur, California ("Akili" n.d). Founded in 2011, it specializes in video game–based treatments for cognitive impairments, primarily attention-deficit/hyperactivity disorder (ADHD), and currently employs between 51 and 200 people ("Akili" n.d; Akili Interactive. n.d.-a). The company states that its broader mission is "of challenging the status quo of medicine" (Akili Interactive n.d-a). In other words, Akili aims to address the lack of effective, non-pharmacological treatments for attention and cognitive disorders by developing technology that can directly train and strengthen the brain systems involved in focus and self-regulation.

Akili operates within the digital therapeutics sector: "Digital therapeutics (DTx) are health softwares intended to treat or alleviate a disease, disorder, condition, or injury…". (Digital Therapeutics Alliance n.d). Digital therapeutics companies increasingly use video games and interactive media to treat a range of conditions including depression and anxiety disorders (Arcade Therapeutics n.d; LiteSprite n.d; DeepWell n.d). The company was acquired in 2024 by Virtual Therapeutics, a privately owned developer of virtual reality (VR) digital therapeutics (Walia 2024; Virtual Therapeutics n.d).

Academic Origins

The company was established by three co-founders: Eddie Martucci, who holds a Ph.D. in molecular biophysics and biochemistry from Yale and served as Akili's longtime CEO, spent nine years at the biotechnology company PureTech Health. He is currently chair of the board of directors ("Eddie Martucci" n.d). The second founder Adam Gazzaley M.D, Ph.D is a, is the David Dolby Distinguished Professor of Neurology, Physiology and Psychiatry at the University of California, San Francisco; he currently serves as Akili's Chief Science Advisor ("Adam Gazzaley" n.d.). The third founding member is Matt Omernick, a BFA in computer animation and prior experience as Executive Creative Director at Microsoft, bringing expertise in interactive entertainment and game design ("Matt Omermick" n.d).

Akili Interactive's core technology originated directly from neuroscientific research led by Gazzaley at the University of California, San Francisco (UCSF). While at UCSF, Gazzaley and his team developed a multitasking video game designed to enhance cognitive control. In a landmark 2013 study published in *Nature*, they showed that older adults who played this custom game significantly improved sustained attention and working memory (Kurtzman 2020).

The company then sponsored a series of clinical trials, several of which were conducted in collaboration with academic institutions (Kurtzman 2020). Clinical data was drawn from studies such as the STARS-ADHD trial. The STARS-Adjunct Trial tested AKL-T01 in 206 children

with ADHD ages 8-14 and found significant improvements in clinician-rated impairment after four weeks of treatment (Maple, Palko, Cañadas 2023). The trial's lead investigator, Scott H. Kollins, is from the Department of Psychiatry and Behavioral Sciences at Duke University School of Medicine, and the study was conducted across multiple U.S. sites with Duke as the primary academic center (Akili Interactive 2020).
These multicenter studies built the evidence base that ultimately led the U.S. Food and Drug Administration (FDA) in 2020 to grant authorization to EndeavorRx (the commercial version of the technology) as the first-ever prescription video game for ADHD (Kurtzman 2020).

Early Venture Funding

From its earliest days, Akili Interactive pursued an external funding strategy. One year after its 2011 founding, the company secured its initial external capital in a Series A, laying the financial foundation for technology development and early clinical work (Crunchbase n.d). The 2016 Series B served as a pivotal inflection point that provided the resources needed to scale operations and advance toward regulatory milestones (they raised $42.4M in their Series B round) (Crunchbase n.d; Global Data PLC).

The momentum continued with a Series C round in 2018 ($68M) and culminated in a substantial Series D led by Neuberger Berman in 2021($110M) (Crunchbase n.d). In total, Akili completed eight funding rounds raising approximately $270.6 million by the close of the Series D (Crunchbase n.d).

Products and Clinical Pipeline

The company developed two video games, EndeavorRx and EndeavorOTC, as prescription and over-the-counter digital therapeutics for ADHD both available on the Google Play store and App Store (EndeavourRx n.d; Endeavour OTC n.d). EndeavourRx is the first game-based therapy cleared for improving attentional functioning in children aged 8–17 with ADHD. It is dispensed exclusively through a physician’s prescription and is priced at US$99 for a 30-day treatment course (EndeavourRx n.d). The company states: "It is recommended EndeavorRx should be used for at least 10 minutes per day with increased benefits with up to 25 minutes of daily play, 5 days per week, over initially at least 4 consecutive weeks, or as recommended by your child’s healthcare provider.” (EndeavourRx n.d-a).

EndeavourOTC, launched subsequently as a direct-to-consumer product for adults, received FDA clearance in 2019 as a non-prescription over-the-counter (OTC) digital therapeutic for adults aged 18 and older seeking to improve attention function. Rather than a flat per-course fee, EndeavourOTC employs a tiered subscription model: a 12-month commitment is offered at US$10.83 per month, a 6-month plan at US$16.66 per month, and a single-month option at US$24.99 (EndeavourOTC n.d).

The Selective Stimulus Management Engine (SSME™) is Akili Interactive's proprietary, patented core technology. The company's entire product portfolio is built on it. SSME is a videogame design strategy that simultaneously delivers targeted sensory inputs (such as moving visual targets or brief auditory cues) and requires concurrent motor tasks (such as tapping or swiping on a touchscreen at the right moment). These combined sensory-motor challenges are specifically designed to engage and stimulate particular brain networks, especially the fronto-parietal regions that handle executive function and attentional processing. In simple terms, it helps the brain rewire itself to improve attention, focus, impulse control, and related cognitive skills. (Akili Interactive n.d-b). Additionally, Akili developed two additional tools that use adaptive video-game–based training to simultaneously challenge specific brain systems, BBT™ targeting attention and executive control through coordinated physical–cognitive tasks, and SNAV™ targeting spatial navigation and memory through immersive scene-based integration (Akili Interactive n.d-b).

The company continued exploring different applications for their technology for neurological and psychiatric conditions (PureTech Health 2022).

Public Listing and Acquisition

In 2022, Akili Interactive became a publicly traded company through a $163 million SPAC merger with Social Capital Suvretta Holdings Corp. I (Reuter 2022). Upon completion of the transaction, the combined entity began trading on the Nasdaq with an opening valuation of $448.56 million (Reuters 2022).

The company's time as a public entity proved relatively brief. After reporting a 49% revenue decline between the fourth quarter of 2023 and the first quarter of 2024, Akili implemented cost-reduction measures that included a reduction of approximately half its workforce (Walia 2024). In 2024, Virtual Therapeutics acquired Akili in a transaction valued at approximately $34 million (Walia 2024). Akili shareholders received $0.4340 per share of common stock, representing a 4% premium over the closing price on May 28, 2024 (Health Care IT 2024). There is no public information on what caused the revenue change. Following the close of the deal, Akili became a wholly owned subsidiary of Virtual Therapeutics and was delisted from public exchanges (Health Care IT 2024).

-A.U, Fall 2025

References

"Adam Gazzaley". n.d. "Adam Gazzaley" *LinkedIn* https://www.linkedin.com/in/adam-gazzaley-6b54366/

"Akili." n.d. "Akili". *LinkedIn.* https://www.linkedin.com/company/akili-interactive-labs-inc-/about/

Akili Interactive. n.d.-a. "Eddie Martucci, PHD." *Akili Interactive* https://www.akiliinteractive.com/eddie-martucci

Akili Interactive. n.d-b. "Products."Akili Interactive. https://www.akiliinteractive.com/product-development

Akili Interative. 2020. “Akili Announces Publication of AKL-T01 ADHD Pivotal Study Results in the Lancet Digital Health.” *Akili Interactive* https://www.akiliinteractive.com/news-collection/akili-announces-publication-of-akl-t01-adhd-pivotal-study-results-in-the-lancet-digital-health

Akili Interactive. 2021. “Akili Founders Recognized by Newsweek on Inaugural List of America’s 50 Greatest Disruptors.” *Akli Interactive.* https://www.akiliinteractive.com/news-collection/akili-founders-recognized-by-newsweek-on-inaugural-list-of-americas-50-greatest-disruptors

Arcade Therapeutics. n.d. “About”. *Arcade Therapeutics.* https://arcadetherapeutics.com/about-us/

Crunchbase. n.d. “Akili Interactive.” *Crunchbase.* https://www.crunchbase.com/organization/akili

DeepWell. n.d. “Where Media is Medicine”. *DeepWell* https://www.deepwelldtx.com/

Digital Therapeutics Alliance. n.d. “What is a DTx?”. *Digital Therapeutics Alliance*. https://dtxalliance.org/understanding-dtx/what-is-a-dtx/#:~:text=DTx%20products%20are%20intended%20to:%20*%20Generate,Medication%20adherence%20*%20Monitoring%20*%20Patient%20diagnosis

“Eddie Martucci.” n.d. *Linkedin*. https://www.linkedin.com/in/eddiemartucci/

EndeavourRx. n.d. “Getting a Prescription ”. *EndeavourRx*. https://www.endeavorrx.com/getting-a-prescription/

EndeavourRx. n.d- a. “Frequently Asked Questions.” *EndeavourRx.* https://www.endeavorrx.com/faq/#:~:text=How%20should%20EndeavorRx%20be%20used,to%20test%20out%20the%20treatment?

EndeavourOTC. n.d. “Home”. *EndeavourOTC.* https://www.endeavorotc.com

EndeavourOTC. n.d-b. “Evidence”. *EndeavourOTC* https://www.endeavorotc.com/evidence/

Global Data PLC. 2016. Akili Interactive Labs Raises Additional USD12 Million in Series B Venture . *GlobalData plc.* Proquest

HealthCare It. 2024. “Virtual Therapeutics, Akili Interactive Enter into Definitive Merger Agreement to Establish Leading Digital Health Company.” *Newstex*. Proquest

Kurtzman, Laura. 2020. “FDA Approves Video Game Based on UCSF Brain Research as ADHD Therapy for Kids.” *University of California*. https://www.universityofcalifornia.edu/news/fda-approves-video-game-based-ucsf-brain-research-adhd-therapy-kids.

LiteSprite. n.d. “Home.” *LiteSprite.* https://www.litesprite.com/

Maple, Amanda, Lisa Palko, Elena Cañadas. 2023. “ STARS Adjunct Trial: Evidence for the Effectiveness of a Digital Therapeutic as Adjunct to Treatment With Medication in Pediatric ADHD”. *ResearchNet.* https://www.researchgate.net/publication/370036674_STARS_Adjunct_Trial_Evidence_for_the_Effectiveness_of_a_Digital_Therapeutic_as_Adjunct_to_Treatment_With_Medication_in_Pediatric_ADHD

“Matt Omernick”. n.d. “Matt Omermick”. *Linkedin* https://www.linkedin.com/in/momernick/

Reuter, Elise. 2022. “Akili Raises $163M in ‘Blank-Check’ Merger, Plans to Commercialize Digital Treatment for ADHD.” *MedTech Dive*. https://www.medtechdive.com/news/akili-goes-public-SPAC-social-capital/630184/.

PureTech Health.2022. “PureTech Founded Entity Akili Announces Phase 3 Study of Digital Treatment in Children with ADHD Begun by Shionogi in Japan.” *PureTech Health* https://news.puretechhealth.com/news-releases/news-release-details/puretech-founded-entity-akili-announces-phase-3-study-digital/

Virtual Therapeutics. n.d. “Home” . *Virtual Therapeutics*. https://www.vthera.com

Walia, Esha. 2024. "Seattle-Area Company Buys Akili Interactive: Boston Firm Makes Games to Treat ADHD." *Boston Globe*. ProQuest

Annapurna Games

Founded on December 1st, 2016, Annapurna Games LLC, doing business as Annapurna Interactive, is an independent video game publisher in West Hollywood, CA. It is a subsidiary of Annapurna Pictures. It has published six titles often from independent developers to date, releasing only two titles in 2017 and the rest in the subsequent year and a half. It strategically publishes across platforms, only selecting a few per game, including PC (GOG, Steam, and Epic Games Store), mobile (iOS and Android) and console (PlayStation 4, Xbox One, and Nintendo Switch) (Annapurna Interactive 2019). It re-published "Gone Home" for the Nintendo Switch and iOS and "Kentucky Route Zero: TV Edition" for consoles, bringing well-received indie games to new audiences with less of its own investment. The company has plans to publish at least five more titles in 2019 including the anticipated Sayonara Wild Hearts by Simogo (exclusive to Switch) and The Pathless from the creators of ABZÛ (Annapurna Interactive 2019). Founded by Megan Ellison, Nathan Gary, and James Masi, Annapurna Games embodies the same culture as Annapurna Pictures: anti-corporate, high-end, and artist-focused.

Founding and Business Style

Like Annapurna Pictures, Annapurna Games can be considered an extension of Megan Ellison's artistic vision. The daughter of tech giant Larry Ellison, Megan Ellison founded Annapurna Pictures after receiving at least $1B from her father. Despite receiving criticism for her "mercurial" attitude and her high-cost, high-risk films, her vision is clear: to create high quality, artistic content by "pridefully spend[ing] what it takes to get visionaries seen and heard," (Harris 2019). Only needing to answer to her father, Ellison remains unconcerned with the $39M lost on "The Sister Brothers," or other financial setbacks (Lang and Donnelly 2018).. She tweeted, "I have done good things for the industry and you want me in it… and my dad thinks I'm dope as f*ck," (Harris 2019).

Claiming to have a long-standing passion for video games, Ellison has approached publishing games with the same patron-like attitude and business tactics. In the same way she started Annapurna Pictures by hiring top directors, Ellison lured top Sony designers, including Journey's Jenova Chen, to release beautifully crafted, highly-praised games.

Her main focus is to carefully select auteur-led games that surpass mainstream culture. Less concerned with the bottom line, Ellison is willing to fund expensive games with long development times. For example, What Remains of Edith Finch took three years to develop while Donut County took six (Pressburg 2017). Additionally, developers such as Derek Bradley (Ashen), Ken Wong (Florence), and Ben Esposito (Donut County) all concur that Annapurna Games allowed them the freedom to create the games they envisioned. Wong states that games released by Annapurna Games "tend to be beautiful experiences that push and prod at the

boundaries of what games can be," each with their own "unique" voice or worldview (Batchelor 2018). Evidently, Annapurna Games does not invest in intellectual property, but rather in the game developers.

Published Games

The selectivity that Annapurna allows itself, coupled with its emphasis on fulfilling a developer's non-mainstream vision is extremely rare in the gaming industry. A high-risk, hits business in which only a few titles make most of the money, many game publishers release games across a variety of genres and platforms hoping one will resonate with a mass audience. Others focus on a niche market, but few, if any, focus on bringing a developer's unique "philosophy" to life (Batchelor 2018). Yet, Annapurna Games has been able to consistently deliver games praised for their narrative style.

Although, non-mainstream in nature, games published by Annapurna, especially those on mobile, tend to have simple mechanics that make it easy for anyone to play. For example, Florence uses basic puzzles to tell Florence's story, Donut County only requires the player to move a hole in the ground to swallow an entire scene, and Gorogoa is "impeccably simple" in letting players arrange illustrated panels to solve puzzles (Annapurna Interactive 2019). Those published on PC and console, although more complex, still have a wide appeal. Ashen and Due Process (to be released) make use of unique social components to keep players engaged. Specifically, Ashen, as a passive multiplayer, challenges players to communicate through nonverbal cues. Due Process will "introduce an evolution of the FPS scenario" by creating novel situations even within the same map (keeping people from gaining an advantage by memorizing it) and by requiring that teams strategize over voice-chat before entering a match (Annapurna 2019).

Even though financial data is limited, games like Donut County and What Remains of Edith Finch remain as top-recommended games of their genre on the iOS app store. SensorTower reports that five of Annapurna's games (Florence, Donut County, Gorogoa, Flower and Gone Home) were downloaded about 30,000 times and generated over $100,000 in revenue during the month of March 2019 (Sensor Tower 2019). Many have won awards. Edith Finch took BAFTA's highest honor Game of the Year, while Gorogoa won in the Debut Game category (Batchelor 2018). Florence won Best Mobile Game during The Game Awards 2018 and Donut County won Apple's iPhone Game of the Year award (Batchelor 2018).

The Intersection of Games and Film

Undoubtedly, Annapurna's core business – film – influences the games it chooses to release. Although other game companies that stemmed from film companies, such as LucasArts, Fox Interactive and Disney Interactive Studios, are no longer in business, Annapurna Games does not seem to be slowing down. While Ellison acts as a "patron" of artistic high-quality games, others

argue that the company only funds these games because there is an untapped market for them (AllGamers Staff 2017). Indeed, the praise the company has received is a result of games that tell a story, deliver a unique and visually striking design, and a great soundtrack. For instance, Edith Finch reveals an emotional narrative through “tellings,”as dubbed by Time Magazine, in which “each vignette unfurl[s] like a piece of gameplay snapped off from some other game, singular and fascinating,” (Peckham 2017). Even Ashen, an RPG, has a greater story of loss and relationships that drives gameplay. Donut County wraps individual levels around a larger narrative that a player must click through to move forward while commenting on real-world issues such as gentrification (Byrd 2018). The game is also celebrated for its soundtrack which retails at Barnes & Noble for $49.75 on vinyl.

Consequently, while Annapurna Games has been successful in releasing indie hits, made unique and appealing to a wider audience by their resemblances to film, profitability is shrouded by the company’s small media presence, preferring to let the “games speak for themselves” (Batchelor 2018). In fact, almost no current information exists about the company, besides that geared towards new releases of games. Still, the limited amount of financial information seems positive even though Ellison’s commitment to the games’ developers have resulted in long development times and a significant allocation of resources. Yet, the company has acted strategically in re-publishing titles that keep true to their vision while avoiding development costs (and possibly acting as a buffer while other games are in development). In the end, profitability may simply not be a deciding factor as long as video games maintain Ellison’s interest enough to convince her to input her money into new games.

- E.C., Spring 2019

References

AllGamers Staff. 2017. “Annapurna Embraces Gaming in What Remains of Edith Finch.” AllGamers. April 28, 2017. https://allgamers.com/article/2611/annapurna-embraces-gaming-in-what-remains-of-edith-finch

Annapurna Interactive. 2019. “Annapurna Interactive.” Annapurna Pictures, May 5, 2019. http://annapurna.pictures/interactive/

Batchelor, James. 2018. “People of the Year 2018: Annapurna Interactive.” Gamesindustry.biz, December 11, 2017. https://www.gamesindustry.biz/articles/2018-12-11-people-of-the-year-annapurna-interactive

Byrd, Christopher. 2018. “Donut County is a little bit about gentrification – and a whole lot of fun.” The Washington Post, August 30, 2018. https://www.washingtonpost.com/news/comic-riffs/wp/2018/08/30/donut-county-is-a-little-bit-about-gentrification-and-a-whole-lot-of-fun/?utm_term=.a8859fb1ee5b

Harris, Hunter. 2019. “Annapurna Founder Megan Ellison and Her Cash Don’t Really Care About the Studio’s Negative.” Vulture, March 12, 2019. https://www.vulture.com/2019/03/megan-ellison-annapurna-bad-press.html

Lang, Brent and Matt Donnelly. 2018. “As Annapurna Stumbles, Billionaire Larry Ellison Exerts Control.” Variety, October 10, 2018. https://variety.com/2018/film/news/annapurna-larry-ellison-megan-ellison-vice-1202975648/

Peckham, Matt. 2017. “Review: ‘What Remains of Edith Finch’ Is a Powerful Elegiac Mystery.” Time Magazine, April 24, 2017. http://time.com/4751800/what-remains-of-edith-finch-review/

Pressberg, Matt. 2017. “Ellison’s First Annapurna Video Game Is as Quirk as Her Movies.” TheWrap, April 17, 2017. https://www.thewrap.com/annapurna-interactive-video-game-megan-ellison-edith-finch-quirky/

SensorTower. 2019. “Annapurna Interactive.” SensorTower, May 5, 2019. https://sensortower.com/ios/publisher/annapurna-interactive/1242610251

Apple Arcade

Overview

Apple Arcade is a subscription gaming service launched by Apple Inc., an American multinational technology company that specializes in consumer electronics, computer software, and online services. Apple Arcade employs Apple's proprietary operating systems and is accessible on all Apple products through the iOS App Store. Priced at 4.99 USD per month, the Arcade offers subscribers unlimited access to a selection of over 110 games—all available to download for offline play—with no in-app purchases or additional costs. This subscription can be split among up to 6 family members and includes all future updates to existing games, as well as new games that are added on a weekly basis ("Apple Newsroom" 2019).

The Start of Apple Arcade

Before the Arcade, games were dispersed among the many genres of downloadable applications available on the App Store, which serves Apple's "two-sided market" strategy to offer third-party software on its devices (Nieborg 2016). The App Store is a digital distribution platform that has been integrated into Apple products since 2008. At its launch, the App Store offered 500 applications, many of which were mobile games (Winkleman 2018). It grew quickly, and with it the selection of games available for either free or paid download. Within 5 years, games made up 80 percent of the total revenue in mobile application stores (Nieborg 2016). By the introduction of iOS 11, the App Store had a separate "Games" tab for users' ease of access (Cross 2019).

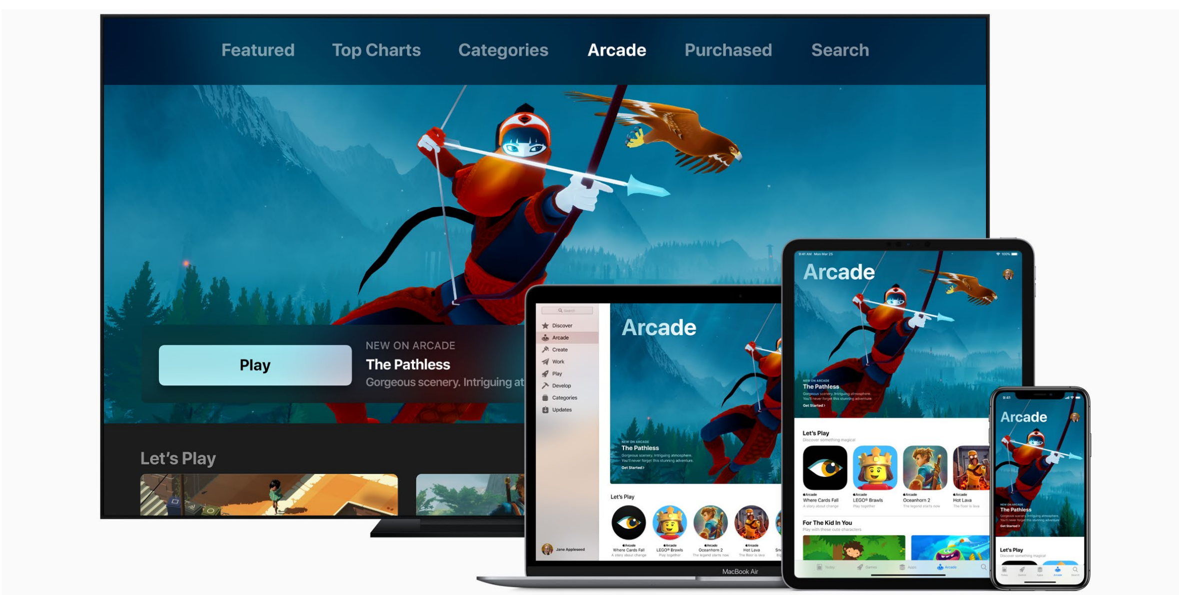


Figure 1. Images from press release for Apple Arcade as published on Apple's website ("Apple Newsroom" 2019).

Apple announced its plans for Apple Arcade in March 2019 and then launched the service in September of the same year. In the weeks preceding the official launch, Apple advertised the service to existing Apple users directly through the App Store, as well as in external advertisements aimed at the general public. The launch consisted of the addition of a tab in the App Store titled "Arcade" from which users access games included in the subscription service. It emerged with 50 games and many more on the horizon. There are currently over 100 games in progress for publication on Apple Arcade (Lubek 2019).

In a press release for the service, Apple emphasized fundamental principles surrounding privacy, security, quality, and curation ("Apple Newsroom" 2019). The new service marks Apple's entry into "cloud gaming" as it functions seamlessly across devices with Apple's OS software platforms—iPhone, iPad, Mac, iPod Touch, and Apple TV—through a connection to the iCloud. To date, key games include *The Enchanted World*, *Where Cards Fall*, and *Shinsekai: Into the Depths* (Brown 2020).

Monetization Scheme

The App Store contains 300,000 free or paid games and attracts over 1 billion gaming customers. By using this existing user base as a target market, Apple Arcade has access to a large pool of potential consumers ("Apple Newsroom" 2019). As customary with subscription services, Apple Arcade offers a one-month free trial. Beyond that, there is a flat charge of 4.99 USD each month per user or family unit (up to 6 people). This accumulates to a yearly fee of just under 60 USD for all content and all future updates.

This differs from the current trend in mobile gaming towards free-to-play (F2P) games that cost nothing to download and start playing, but extract revenues through various tactics— often a mixture of in-app purchases and advertisements. Although only a small share of users are willing to spend money for in-game materials or services, it is substantial for some games due to the large general user-base of mobile gaming (Nieborg 2016). Apple Arcade monetizes through a recurring subscription fee driven by a continuous flow of game development with frequent additions of new titles. Additionally, Apple offers exclusivity as games featured on Apple Arcade are not available on other gaming subscription services like Microsoft's Game Pass. However, some Apple Arcade games are available on alternative gaming platforms like PC, Nintendo Switch, Xbox One, or PlayStation 4 (Johnson 2020).

Gaming Ecosystem within Apple Arcade

The current mobile gaming ecosystem consists of many F2P games which "monetize various design elements that can provide basic operations" as well as some that unlock access to premium gameplay (Markopoulos et al. 2020, 393). The game design thus incorporates this monetization by incentivising the purchase of extra play-time or virtual items: a "data-driven design strategy for player retention and monetization" (Nieborg 2016, 234). As a subscription service that provides premium games for a single recurring fee, games on Apple Arcade do not require in-game devices to incentivize consumer spending. Changing the means of making money changes the game design as certain aspects that are crucial for F2P games to be financially viable are omitted (Cross 2019). Apart from the removal of in-game advertising and purchases, games in Apple Arcade can be more geared to consumer needs and enjoyment than

their F2P counterparts by design. Apple Arcade features games with genres ranging from strategy and fantasy, to more niche options (Barrett 2019).

The game creation process has widespread accessibility as "iOS developers do not need expensive proprietary software development kits to initiate game development" (Nieborg 2016, 232). Apple's platform provides developers with the necessary technology. There has been a lack of transparency among developers about how much revenue their games make on Apple Arcade. Similarly, it is unclear what the respective profit sharing agreement is between individual developers and Apple. However, gaming subscription services on other platforms have released information regarding royalties paid to developers depending on metrics like time played or number of engagements (Klepek 2019b). Beyond that, developers have the opportunity to partner with Apple and obtain support for the creation of Apple Arcade games. As there is no post-purchase spending, Apple does not take transactional cuts. It uses its financial resources to fund the creation and publishing of certain games to completion (Klepek 2020).

The span of developers that create games for Apple Arcade ranges from large gaming companies to smaller indie developers. All developers have to meet certain criteria when creating games for the service; the game design must suit the "Apple Arcade experience" (Lubek 2019). There is also the constraint of "mobile exclusivity" for developers— they can develop games for other platforms like PC, Nintendo Switch, or gaming consoles, but mobile versions can only exist on iOS-supported devices (Johnson 2020). Apple places games under scrutiny before they are approved for launch on the service. The screening process is more extensive than that of the App Store, or any other gaming subscription services (Klepek 2020). Because of this Apple is able to curate a library of unique, high-quality games from a diverse range of developers. Recently, Apple brought on Spruce Campbell, a 14-year-old self-taught game designer who pitched *Operator 41* for Apple Arcade (Klepek 2019a). With a plethora of titles, Apple does not focus on advertising specific games, but rather the service as a whole (Klepek 2020).

Looking Forward

Less than a year after the launch of the subscription service, Apple continues to add updates and titles on a regular basis (Lubek 2019). Over the previous year, Apple has pushed into the services industry with Apple Arcade, News+, TV+, and the AppleTV platform of channels (Dilger 2020). During the company's earnings call for the first quarter of 2020, Apple announced 12.7 billion USD in services revenue, although it is unclear what portion is due to Apple Arcade. Newer games like *Crossy Road Castle* and *Roungguard* indicate a shift from less curated to more traditional mobile games (Johnson 2020).

-R.M., Spring 2020

References

"Apple Newsroom." 2019. *Apple Newsroom*. Apple Inc. https://www.apple.com/newsroom/2019/03/apple-introduces-apple-arcade-the-worlds-first-game-subscription-service-for-mobile-desktop-and-the-living-room/.

Barrett, Brian. 2019. "How Apple Arcade Will Reshape Mobile Gaming." Wired. Condé Nast. September 19, 2019. https://www.wired.com/story/apple-arcade-reshape-mobile-gaming/.

Brown, Shelby. 2020. “Apple Arcade: The Full List of Games for IPhone, IPad, Mac and Apple TV.” CNET. May 8, 2020. https://www.cnet.com/news/apple-arcade-full-list-110-games-iphone-ipad-apple-tv-and-ipod-touch-mac-update/.

Cross, Jason. 2019. “Apple Arcade Won’t Save Us from the Scourge of Freemium Gaming, but It’s a Start.” *Macworld - Digital Edition*, September 1, 2019. http://eds.a.ebscohost.com.proxy.library.nyu.edu/eds/pdfviewer/pdfviewer?vid=1&sid=64bd136b-ada8-4afa-82ee-33d72a559b47@sessionmgr4006.

Dilger, Daniel Eran. 2020. “Editorial: Apple's Impact from Social Distancing in 2020.” AppleInsider. Quiller Media, Inc. April 2020. https://appleinsider.com/articles/20/03/25/editorial-apples-impact-from-social-distancing-in-2020.

Johnson, Leif. 2020. “Apple Arcade Is Already Straying from Its Original Promise.” Macworld. Macworld. March 19, 2020. https://www.macworld.com/article/3533331/apple-arcade-six-month-review.html.

Klepek, Patrick. 2019a. “How a 14-Year-Old Designer Became Part of Apple's Splashy New Gaming Service.” Vice. Vice Media LLC. October 3, 2019. https://www.vice.com/en_us/article/8xwvbx/how-a-14-year-old-designer-became-part-of-apples-splashy-new-gaming-service-apple-arcade.

———. 2019b. “It’s Hard to Use Apple Arcade Without Wondering How Developers Will Be Paid.” Vice. Vice Media LLC. September 24, 2019. https://www.vice.com/en_us/article/43k4ww/its-hard-to-use-apple-arcade-without-wondering-how-developers-will-be-paid.

———. 2020. “Five Months In, Here's What Developers Think of Apple Arcade.” Vice. Vice Media LLC. February 21, 2020. Five Months In, Here's What Developers Think of Apple Arcade.

Lubek, Sven. 2019. “Gamasutra.” *Gamasutra* (blog). Informa PLC. December 23, 2019. https://gamasutra.com/blogs/SvenLubek/20191223/356058/6_Leading_Game_Industry_Trends_to_Watch_in_2020.php.

Markopoulos, Evangelos, Panagiotis Markopoulos, Mika Liumila, Younus Almufti, and Vasu Aggarwal. 2020. “Mapping the Monetization Challenge of Gaming in Various Domains.” In *Advances in Human Factors in Wearable Technologies and Game Design*, 973rd ed., 389–400. Washington, D.C.: Springer. https://www.researchgate.net/publication/333784664_Mapping_the_Monetization_Challenge_of_Gaming_in_Various_Domains.

Nieborg, David. 2016. “From Premium to Freemium: The Political Economy of the App .” In *Social, Casual and Mobile Games: The Changing Gaming Landscape*, 225–40. London: Bloomsbury Academic & Professional. http://ebookcentral.proquest.com/lib/nyulibrary-ebooks/detail.action?docID=435576.

Winkelman, Steven. 2018. “A Brief History of the Apple App Store in Its First Ten Years.” Digital Trends. July 10, 2018. https://www.digitaltrends.com/news/apple-app-store-turns-10/.

Asobo Studio

Overview

Asobo Studio is a French video game developer based in Bordeaux. Founded in 2002 by a group of 12 video game developers, Asobo Studio has remained independent with its balance of working for major industry players and creating original titles. As an independent multi-platform development studio, Asobo releases titles for PC (Windows, Mac) and console (Playstation, Xbox, Switch) platforms.

The company developed a series of video game adaptations of Pixar movies for THQ and Disney, including *Ratatouille*, *WALL-E*, and *Up*, which successfully led to the opportunity to make *Kinect Rush: A Disney-Pixar Adventure* for Microsoft (Handrahan 2016). Further, the studio partnered with Ubisoft and Microsoft to produce *Monopoly Family Fun* pack and *Microsoft Flight Simulator* respectively. While working with these industry giants, Asobo Studio is also known for its original adventure game – *A Plague Tale: Innocence*, and *A Plague Tale: Requiem*. As of 2020, the company has developed 24 games with its team of more than 250 talents and sold nearly 11 million copies worldwide. In 2021, Sagard Newgen, a French private equity firm, acquired a minor stake in Asobo Studio. With Sagard Newgen, Asobo Studio gains financial support for its growth while preserving its strategic and creative autonomy, valuing the company at approximately €65 million (Asobo Studio 2021). It is the studio's first time taking investment capital.

Establishment

Asobo Studio was established in 2002 by a group of twelve video game developers from Kalisto Entertainment, a former one of the world's leading video game developers at the end of the 1990s. Kalisto Entertainment was listed on the stock exchange and employed nearly 300 people at that time (César 2013). However, after the bursting of the dot-com bubble in the spring of 2000, the overgrown company fell apart and finally declared bankruptcy in 2002. Nevertheless, the company's talent did not disappear. 28-year-old Sébastien Wloch and David Dedeine, former employees of Kalisto Entertainment, decided to found their own studio, Asobo, in 2002 (César 2013). With ten of their colleagues, they purchased the rights to *Super Farm*, an unfinished multiplayer PlayStation 2 video game, from Kalisto Entertainment and continued its development. In 2003, *Super Farm* was published by Ignition Entertainment for PS2 as Asobo Studio's first video game and the first step in the video game industry.

The studio's name "Asobo" is derived from the Japanese word "*asobō*" (遊ぼう) which means "let's play." This indicates Asobo Studio's philosophy of creating games for every type and all ages of players (Asobo Studio). To achieve this, Asobo Studio has developed or co-developed games across a variety of genres including key entertainment franchises, original action-adventure games, and simulations.

Early Publisher Partnerships

In the early years of its existence, Asobo Studio partnered with larger game publishers, for example, THQ, Ubisoft, and Microsoft, to develop games for IP licensing companies. Chosen by THQ in 2007, the studio had the chance to develop the Walt Disney video game *Ratatouille*, which sold 2.5 million copies worldwide (César 2013). Following, they collaborated with Microsoft and Disney to produce several Pixar video game adaptations, including *WALL-E*, *Up*, and *Kinect Rush: A Disney-Pixar Adventure*. After these early partnerships with industry-leading publishers, Asobo Studio started increasing its growth speed, leading to two separate production lines in the company.

In the following years, Asobo Studio's more mainstream efforts were "largely as a support studio" to assist in developing and remastering existing games with publishers and other studios (King 2023). In 2014, Asobo partnered with Ubisoft to release the *Monopoly Family Fun* pack on console platforms (PlayStation, Xbox), as well as develop an Xbox 360 port of *The Crew* and provide support on remastering *The Crew 2*, which "reached the amazing milestone of 30 million players" combined in 2022 (Vicencio 2022).

Development of Original IP

After accumulating experience, Asobo Studio released its first original adventure game, *A Plague Tale: Innocence*, for PC (Windows) and console (PlayStation, Xbox, Switch, Luna) in May 2019. It is Asobo's first foray into the stealth adventure genre (Dealessandri 2022). The game received strong reviews (Metacritic rating of 81) for its blend of stealth, a strong narrative, and its atmospheric rendering of 14th-century France. It ended up selling 1 million copies in just over a year, and won a Steam Award and 6 Pégases (Handrahan 2020). Building on the success of *A Plague Tale: Innocence*, three years later in 2022 Asobo released the game's sequel, *A Plague Tale: Requiem*, which crossed 3 million copies sold in 2023 according to Focus Entertainment.

Early Collaboration with Microsoft

While maintaining independence, Asobo Studio has established a close collaboration relationship with Microsoft. The major collaboration project between Asobo and Microsoft dates back as far as 2012, when the studio was chosen to develop *Kinect Rush: A Disney-Pixar Adventure*. In this project, Asobo has shown its ability to adapt new technology from big tech when developing *Kinect Rush* with the accommodation of the Xbox Kinect technology, a sensor for the Xbox 360 that detects motion and speech and allows the player to interact with the game without using a physical controller (Cong & Winters).

When Microsoft unveiled its augmented reality (AR) / mixed reality (MR) headset, HoloLens, in 2016, Asobo Studio earned the chance to become the first independent developer to work with HoloLens (Handrahan 2016). The opportunity of trailblazing AR development with Microsoft with this new technology came across due to "the studio's string of successful work on games with Pixar licenses, culminating in a partnership with Microsoft" *Kinect Rush*, using Kinect technology (Baker 2016). Asobo Studio develops two titles for HoloLens: the platformer *Young Conker* and the mystery title *Fragment*. Both of these are AR-based games that allow the game screen to interact with the real world.

Contribution to Microsoft Flight Simulator

In addition to experimenting with new technology, Asobo and Microsoft have been working closely together on PC and console games. The studio assisted Microsoft with a couple of games, but their most notable collaboration was *Microsoft Flight Simulation 2020*, an amateur flight simulator over the Earth, for Xbox Game Studio – the video game department of Microsoft. The game is a return of the *Microsoft Flight Simulator* series which began in 1982. It is also the first game in the series to see a VR and console (Xbox series X/S) release other than PC. Asobo Studio employed the same engine as *A Plague Tale* to develop *Microsoft Flight Simulation 2020*, "even if they are opposite in terms of direction and everything" (Dealessandri 2022).

Underpinned by Microsoft's portfolio of commercially available game development tools, including Bing Maps, Azure AI, and Azure cloud computing, Asobo Studio handcrafted the sceneries of cities and airports to provide high-fidelity user realism (Lavery 2020). Asobo Studio has proven its technical capabilities and success on *Microsoft Flight Simulator* by gaining over 1 million users within the first two weeks of release and $71.0 million gross revenue as of today, and receiving several accolades, most notably winning "Best Sim/Strategy Game" at The Game Awards 2020, and "Strategy/Simulation Game of the Year" at the 24th Annual D.I.C.E. Awards. For the upcoming *Microsoft Flight Simulation 2024*, Xbox Game Studio announced that they will continue collaborating with Asobo Studio to develop the game.

-C.L., Fall 2023

Reference

Asobo Studio. "Asobo Studio Opens Its Capital to Sagard Newgen to Support Its Growth." Asobo Studio, January 21, 2021. Accessed December 10, 2023. https://www.asobostudio.com/news/asobo-studio-opens-its-capital-sagard-newgen-support-its-growth.

Baker, Chris. "What Asobo Studio Has Learned from Designing Games for Hololens." Game Developer, March 22, 2016. Accessed December 10, 2023. https://www.gamedeveloper.com/design/what-asobo-studio-has-learned-from-designing-games-for-hololens.

Cong, Robert, and Ryan Winters. "How It Works: Xbox Kinect - Jameco Electronics." Jameco Electronics. Accessed December 10, 2023. https://www.jameco.com/Jameco/workshop/howitworks/xboxkinect.html.

César, Nicolas. "Asobo, Le Studio de Jeux Vidéo Français Qui a Séduit Microsoft." La Tribune, January 22, 2013. Accessed December 10, 2023. https://web.archive.org/web/20220912124459/https://www.latribune.fr/regions/aquitaine/20130121trib000743842/asobo-le-studio-de-jeux-video-francais-qui-a-seduit-microsoft.html.

Dealessandri, Marie. "Building on the Unexpected Success of a Plague Tale." GamesIndustry.biz, October 18, 2022. Accessed December 10, 2023. https://www.gamesindustry.biz/building-on-the-unexpected-success-of-a-plague-tale.

Handrahan, Matthew. "A Plague Tale: Innocence Reaches One Million Sales." GamesIndustry.biz, July 1, 2020. Accessed December 10, 2023. https://www.gamesindustry.biz/a-plague-tale-innocence-reaches-one-million-sales.

Handrahan, Matthew. "Asobo Studio: Lessons from the Frontline of Hololens Development." GamesIndustry.biz, May 12, 2016. Accessed December 10, 2023. https://www.gamesindustry.biz/asobo-lessons-from-the-frontline-of-ar-development.

Handrahan, Matthew. "Microsoft Flight Simulator: Critical Consensus." GamesIndustry.biz, August 18, 2020. Accessed December 10, 2023. https://www.gamesindustry.biz/microsoft-flight-simulator-critical-consensus.

Vicencio, Chastity. "The Crew 2 Celebrates Its 4th Anniversary, Season 6 Episode 1 Coming July 6." Ubisoft® - Official Ubisoft News, Previews and Features. Accessed December 10, 2023. https://news.ubisoft.com/en-us/article/3YStkhTXwjPEAeEPH4EhNr/the-crew-2-celebrates-its-4th-anniversary-season-6-episode-1-coming-july-6.

Atlus

Overview

Atlus, also known as Atlus Co., Ltd. was founded on April 7, 1986 and is a video games developer, publisher, arcade manufacturer, and distributor. Atlus's main company is located in Tokyo, Japan; however, the company has established two other branches: a North America branch called Atlus West, which was founded in 1991, focusing on publishing and localizing games in North America, and an European branch handled by the Sega of Europe Division in London that was founded in 2017. Atlus was bought by Sega in 2013 and currently is considered as a subsidiary company under Sega, but the two companies operate separately where all existing Atlus franchises remain under the Atlus brand name.

As of October 2019, the company has around 300 employees with a capital amount of 10 million yen. Atlus's portfolio of intellectual properties includes their most renowned *Shin Megami Tensei* series, *Persona*® series, *Trauma Center*, and many more. Atlus is recognized for its role playing games and has established a long-time name for their *Shin Megami Tensei* franchise and *Persona*® franchise. Atlus's mascot consists of a character from their *Shin Megami Tensei* series called Jack Frost, a snow-man like character. From its history of going from its own parent company to a subsidiary under Sega, Atlus has been consistent with their works in producing content to their most renowned series that have continued to sell well amongst fans internationally and domestically.

Before Sega Acquisition

Founded by Akira Nomoto on April 7, 1986, Atlus was originally its own parent company that developed video games for other companies and later on became a publisher. Atlus sold amusement equipment and expanded into selling karaoke equipment in its early years. Its first video game that was released was in 1989 called *Puzzle Boy* for Game Boy. Atlus started in the arcade industry in the 1990s and manufactured and sold "Print Club (Purikura)," an original sticker printing machine (selfie photos) used for businesses. It was introduced in arcades and eventually expanded into other industry areas such as train stations, fast food places, karaoke establishments, and bowling alleys. From 1996 to 1998, Atlus created a subsidiary in the United States and Singapore and then in 2000, it formed a joint venture with Kadokawa Shoten to distribute and sell games. In 2001, Atlus acquired Career Soft and published the *Growlanser* series and later one had the staff merge with the development team of Atlus to create the *Shin Megami Tensei: Devil Survivor* games. Around 2006 is when Atlus was purchased by Index Corporation (Holdings), and was considered a brand name for its current parent company. Atlus USA was utilized as a third-party publisher company to localize English versions into the United States (Wayback Machine, n.d.).

Atlus USA

Atlus has created one North American branch in 1991 called Atlus USA that localizes games in North America from the company itself and other third-party developers. When the company was under Index Corporation, the company name was changed to Index Digital Media but as Sega claimed Atlus after Index Corporation filed for bankruptcy, the name was changed to Atlus

West. Atlus became famous through its *Megami Tensei* role-playing franchise though its series was seen as too dark for the overseas market with the usage of religious taboos and images; therefore, their first localization game was through their subseries *Persona* called *Revelations:Persona* on the Playstation, and the company kept the game as close to the original Japanese version as possible.

Later when *Grand Theft Auto* became a huge success, Atlus West tried to introduce their *Megami Tensei* riding on the wave of more mature games being introduced into the games market. By sticking to the original Japanese demon names within the game and marketing, the *Megami Tensei* became well-known (Kalata, 2015). Eventually, as voice acting was more used in game development, since the original Japanese version contained famous Japanese voice actors, the company found well-known English voice actors and tried to make the characters more understandable to the Western audience.

After Sega Acquisition

In June 2013, Index Corporation faced bankruptcy with debts of ¥24.5 billion — roughly $224 million though the Atlus brand was not affected. Later in September, Sega won the bid to gain the Atlus brand and was transferred to Sega Dream Corporation and gained its division name back to Atlus and its other companies. Sega then stated that all future title releases in North America will be published by Sega of America where both companies will act autonomously while combining the benefits of both companies: Atlus's experience in localizing Japanese games and Sega's reputation as a leading publisher (McWhertor, 2016).

The company has created three divisions that separate its duties on their IPs: Creative Department 1st Production(managing the *Shin Megami Tensei* and *Etrian Odyssey* series), Creative Department 2nd Production (P-Studio responsible for the *Persona* series), and Creative Department 3rd Production (Studio Zero) (Minotti, 2016). In 2017, through Sega Europe's offices in London, Atlus was able to establish an European branch that will allow localization titles to be published throughout Europe and allow the company to launch special edition sets and products that are offered in North America to the new region (Romano, 2017).

Renown Series

Atlus most notable game series has been their *Megami Tensei* series that was first created in 1987 with their first game *Digital Devil Monogatari:Megami Tensei*. This series was inspired by a novella by Aya Nishitani about "a disaffected Japanese teenager discovering a computer program with the ability to summon and bind demons." The series later was rebranded into the franchise *Shin Megami Tensei* utilizing more original narratives and categorized as a Japanese role playing game. Some games under the franchise name have consisted of various types of mechanics from dungeon crawlers, to strategy tactics, to free exploration, but all their fighting mechanics are the same in being turn-based. In addition, an iconic feature to this series is that they all utilize the idea of the main character and his allies befriending demons to fight other demons through a summoning device, usually an electronic device (Parish, 2018).

Another well-known series is the *Persona* series which is a sub-series from the *Shin Megami Tensei* series. This franchise utilizes the same types of mechanics as its parent series but takes on

a different type of narrative story. These two series have long lasting popularity since as of 2017, the *Shin Megami Tensei* series have sold approximately 7.2 million units across 28 total editions while the *Persona* series have sold approximately 8.5 million units across 13 total editions (Romano, 2017). The most recent games that have been released are the *Persona 5* game which has sold more than 3.2 million units worldwide, and *Persona 5 Royal* having over 400,000 units shipped in Japan (Romano, 2021), and *Shin Megami Tensei V* selling over 800,000 units worldwide outselling its predecessor *Shin megami Tesei IV* by 200,000 units (Restrepo, 2022). Even today these two series are the most renowned and have continued to give Atlus its name in producing successful games.

-S.Y. Spring 2022

References

"Company: Atlus West Official Website." Atlus West, April 18, 2019. https://atlus.com/company/.

Kalata, Kurt, and Christopher J. Snelgrove. "Hardcore Gaming 101 - Megami Tensei / Shin Megami Tensei." Hardcore Gaming 101: Megami Tensei / Shin, 2005. http://hardcoregaming101.net/megaten/megaten.htm.

McWhertor, Michael. "Sega Will Publish All Future Atlus Games, Finalizes Acquisition." Polygon. Polygon, April 1, 2016. https://www.polygon.com/2016/4/1/11345238/sega-will-publish-all-future-atlus-games-finalizes-acquisition.

Minotti, Mike. "Atlus Forms New Studio Zero and Tasks Persona Director on a Fantasy Role-Playing Game." VentureBeat. VentureBeat, December 23, 2016. https://venturebeat.com/2016/12/23/atlus-forms-new-studio-zero-and-tasks-persona-director-on-a-fantasy-role-playing-game/.

Parish, Jeremy. "The Shin Megami Tensei Games Beginner's Guide." Polygon. Polygon, August 1, 2018. https://www.polygon.com/guides/2018/8/1/17509374/shin-megami-tensei-games-persona-explainer-guide.

Restrepo, David. "Shin Megami Tensei V Surpasses Predecessor's Lifetime Sales." DoubleXP, January 2, 2022. https://doublexp.com/news/shin-megami-tensei-v-surpasses-predecessors-liefetime-sales.

Romano, Sal. "Atlus Establishes European Publishing Division." Gematsu, August 24, 2017. https://www.gematsu.com/2017/08/atlus-establishes-european-publishing-division.

Romano, Sal. "Persona 5 Worldwide Shipments Top 3.2 Million; Persona 5 Royal Japanese Shipments Top 400,000." Gematsu. Gematsu, July 13, 2021. https://www.gematsu.com/2019/12/persona-5-worldwide-shipments-top-3-2-million-persona-5-royal-japanese-shipments-top-400000.

Romano, Sal. "Persona Series Sales Top 8.5 Million, Megami Tensei Series Sales Top 7.2 Million." Gematsu. Gematsu, October 30, 2017. https://www.gematsu.com/2017/10/persona-series-sales-top-8-5-million-megami-tensei-series-sales-top-7-2-million.

Wayback Machine. Accessed May 7, 2022. https://web.archive.org/web/20031209003138/http://www.atlus.co.jp/about/kaisha_enkaku.html.

"アトラスについて: リクルート: アトラス公式サイト." リクルート | アトラス公式サイト. Accessed May 7, 2022. http://www.atlus.co.jp/recruit/about/company/.

Autodesk, Inc.

Overview

Autodesk, Inc. is an American software corporation that develops 3D design software for architectural, engineering, construction, and entertainment industries (Encyclopedia 2020). Founded by John Walker in 1982, Autodesk began after Walker acquired AutoCAD, a software for a computer-aided design program, from inventor Michael Riddle in exchange for $10 million USD in royalties. In 1985, Walker made Autodesk public and left his role as CEO the following year. Headquartered in San Rafael, California, Autodesk relied on AutoCAD for most of its revenue until the early 2000s, where new CEO Carol Bartz diversified Autodesk's portfolio and began addressing design-software needs of customers in other sectors such as digital media markets. In terms of game design, Autodesk software has produced notable titles such as *Call of Duty: Black Ops III, Uncharted 4: A Thief's End,* and *Watch Dogs 2* (Autodesk 2020).

MAYA

Maya is a 3D computer animation, modeling, simulation, and rendering software and one of Autodesk's most recognizable products for game development. The software was originally developed by Alias Systems Corporation (formerly known as Alias | Wavefront) in 1998 and was the apex of three 3D software lines: Thomson Digital Images's Explore, Wavefront's Advanced Visualizer, and Alias's Power Animator (SimplyMaya 2016). The creation of Maya was a response to Microsoft's 1994 acquisition of Softimage, a 3D computer graphics application. Threatened by the possibility of market domination, Alias created Maya to compete with Softimage. Maya quickly became the standard in 3D graphics with its performance capabilities in the 2000 Disney film *Dinosaur.* Alias, along with the Maya software, was acquired by Autodesk in 2006 for $197 million USD (Autodesk News Release 2006). With Alias's technology, the acquisition was intended to support Autodesk's growing media and entertainment consumer base.

Multiple AAA game studios (EA Sports, Dice, Ubisoft, Behaviour, Insomniac Games, 343 Industries) incorporate Maya into their development pipelines in some fashion (Autodesk 2020). The software can be used to help game developers build 3D environments, realistic characters, and immersive effects. In game-development pipelines, Maya can be used for modeling, texturing, rigging, animation, and special effects.

In 2016, Autodesk ended the sale of perpetual licenses, and Maya is now a subscription based software that can be purchased monthly ($205), yearly ($1,620), or every three years ($4,375) (Autodesk 2020). On August 7, 2020, Autodesk stopped the sale of licenses with multi-user access and now only allows one user per license. Autodesk offers two versions of the software: Maya and Maya LT. Maya LT has the same basic capabilities of Maya but without the more rigorous rendering and effects tools. It is offered at a more affordable price point to appeal to indie game developers.

Competition Buyouts

Similar to the Alias acquisition, Autodesk has acquired multiple companies and softwares over the years. In 2007, the company acquired New Zealand-based developer Skymatter, who were the makers of the modeling software Mudbox 3D (Boyer 2007). Autodesk intended for assets created in Mudbox to be imported into 3ds Max and Maya to be textured, rigged, animated, and rendered, creating more product value for its customers in the film, television, and game market segments. Mudbox, a brush-based software that allowed the creation of organic shapes in 3D space, was already in use in studios such as Epic Games, Weta Digital, and Blur Studio.

In 2008, Autodesk acquired Avid's Softimage business sector for $35 million USD, which was previously purchased from Microsoft in 1998 (Carless 2008; Microsoft 1998). With the acquisition of Softimage, Autodesk united three of the most-used and formerly competing 3D game art softwares: 3ds Max (which was already published under Autodesk), Maya, and Softimage (Carless 2008). Softimage was a well-known 3D graphics software solution and was used by large game developers such as Ubisoft, Capcom, and Sega. However, by 2014, Autodesk announced that it would no longer sell or update Softimage by 2015, leading customers to migrate to 3ds Max and Maya (Autodesk 2014).

Also in 2008, Autodesk acquired artificial intelligence middleware developer Kynogon (Boyer 2008). The software gives characters spatial awareness, allowing realistic navigation in digital environments and was used in games such as *Alone in the Dark 5, Crackdown, Fable 2,* and *The Lord of the Rings Online: Shadows of Angmar.* In 2011, Autodesk acquired user interface middleware company Scaleform, whose technologies allowed developers to use 3D hardware to create more immersive menus, in-game heads-up displays, animated textures, minigames, mobile games, and apps (Graft 2011).

Autodesk went on to acquire the cloud production company Shotgun Software in 2014. Shotgun Software provided tracking and asset management solutions for video games (Rose 2014). Autodesk also acquired Stockholm-based company Bitsquid and its 3D game engine in 2014 (Rose 2014). The Bitsquid acquisition bolstered Autodesk's game development products as the Bitsquid engine features Windows, PS4, PS3, Xbox 360, Android and iOS support, along with multi-core scaling, a lightweight code base, and data-driven rendering. In 2016, Autodesk acquired rendering outfit Solid Angle (Kerr 2016). Solid Angle is the developer behind Arnold, a ray-tracing image renderer used to construct high-quality 3D animations and visual effects.

Through acquisitions, Autodesk solidified its position in the 3D graphics and game development industries. In 2017, the company removed its suite of game middleware products (Scaleform, Navigation, HumanIK, Beast) from its digital shelves (McAloon 2017). This allowed Autodesk to focus on Maya, 3ds Max, and Arnold, which are now the only three softwares advertised in its media and entertainment collection (Autodesk 2020). However, there has been customer outrage against the forced migration to specific softwares and the transition from perpetual licenses to subscription-based plans (Johnson 2017).

Future of Autodesk

With the move to subscription-based packages, Autodesk reduced its workforce by 10% (925 positions) in 2016 in an effort to lower costs while accelerating the transition to cloud and

subscription-based models (Nutt 2016). In 2017, Autodesk cut 13% of its workforce (1,150 positions) as part of the company's ongoing efforts to transition to a subscription model while rebalancing investments from one sector to another (Kerr 2017).

As Maya and Autodesk's other 3D softwares have high subscription rates, the corporation has looked to expand its consumer base by promoting lower-cost alternatives. Maya LT was released in 2013 and can be purchased at a fraction of the cost compared to Maya (Autodesk 2020). With Maya LT, Autodesk hoped to appeal to indie game developers, beginners, and new users. Maya LT has been used in notable studios such as Ghost Town Games (makers of *Overcooked)* and Compulsion Games (makers of *Contrast* and *We Happy Few*). In 2019, the company also offered indie creators a pilot licensing program for 3ds Max and Maya, further recognizing that the price of Maya and 3ds Max may be a burden during low workload seasons (Maher 2020). The license is only available to people who make less than $100,000 USD a year but is still restricted to one user per license. As this is a pilot program, the offer is only available to people in Australia, Canada, New Zealand, the United Kingdom, and the United States and will expand depending on its performance. Through these initiatives, Autodesk hopes to appeal to a wider customer base and set Maya, and the rest of its softwares, as the standard for 3D creation and game development.

-L.C., Spring 2020

References

"Autodesk, Inc." International Directory of Company Histories. Encyclopedia.com, May 13, 2020. https://www.encyclopedia.com/social-sciences-and-law/economics-business-and-labor/businesses-and-occupations/autodesk-inc.

Autodesk. "Autodesk Completes Acquisition of Alias." Autodesk, Inc., January 10, 2006. https://investors.autodesk.com/news-releases/news-release-details/autodesk-completes-acquisition-alias.

Autodesk. "Licensing Options: Single-User, Multi-User, Network." Autodesk, 2020. https://www.autodesk.com/licensing/overview.

Autodesk. "Maya LT: Game Design & Development Software." Autodesk. Accessed May 14, 2020. https://www.autodesk.com/products/maya-lt/overview?mktvar002=3466781%7CSEM%7C288488115%7C23187929115%7Ckwd-361560049397.

Autodesk. "Maya Subscription: Buy or Download Maya 2021 Software." Autodesk. Accessed May 14, 2020. https://www.autodesk.com/products/maya/subscribe?support=ADVANCED.

Autodesk. "Media & Entertainment Collection: Animation And Rendering Software." Media & Entertainment Collection | Animation And Rendering Software. Accessed May 14, 2020. https://www.autodesk.com/collections/media-entertainment/overview.

Autodesk. "Softimage Final Release Announcement." Softimage 2015 Final Release Announcement, 2014. https://www.autodesk.com/products/softimage/overview.

Boyer, Brandon. "Autodesk Acquires Mudbox 3D Modeling Developer Skymatter." Gamasutra, August 6, 2007. https://www.gamasutra.com/view/news/105943/Autodesk_Acquires_Mudbox_3D_Modeling_Developer_Skymatter.php.

Boyer, Brandon. “Autodesk To Acquire AI Developer Kynogon.” Gamasutra, February 19, 2008.https://www.gamasutra.com/view/news/108444/Autodesk_To_Acquire_AI_Developer_Kynogon.php.

Graft, Kris. “Autodesk To Buy Scaleform For $36M.” Gamasutra, February 16, 2011. https://www.gamasutra.com/view/news/123503/Autodesk_To_Buy_Scaleform_For_36M.php.

Johnson, Steve. “Autodesk Customers Are Still Revolting.” cad nauseam, April 7, 2017. https://www.cadnauseam.com/2017/04/07/autodesk-customers-are-still-revolting/.

Kerr, Chris. “Autodesk Acquires Rendering Outfit, Solid Angle.” Gamasutra, April 19, 2016. https://www.gamasutra.com/view/news/270800/Autodesk_acquires_rendering_outfit_Solid_Angle.php.

Kerr, Chris. “Autodesk Cuts 1,150 Jobs as It Shifts to Subscription Model.” Gamasutra, November 29, 2017. https://www.gamasutra.com/view/news/310612/Autodesk_cuts_1150_jobs_as_it_shifts_to_subscription_model.php.

Maher, Kathleen. “Autodesk & Blender: Courting Creatives • GraphicSpeak.” GraphicSpeak, March 9, 2020. https://gfxspeak.com/2020/03/06/autodesk-courting-creatives/.

McAloon, Alissa. “Autodesk Axes Scaleform, Beast, HumanIK, and Navigation Game Dev Software.” Gamasutra, July 14, 2017. https://www.gamasutra.com/view/news/301778/Autodesk_axes_Scaleform_Beast_HumanIK_and_Navigation_game_dev_software.php.

Microsoft. “Microsoft Softimage to Be Acquired by Avid Technology.” Stories, June 15, 1998. https://news.microsoft.com/1998/06/15/microsoft-softimage-to-be-acquired-by-avid-technology/.

Nutt, Christian. “Autodesk to Lay off 925 in Transition to Cloud-Based Tools.” Gamasutra, February 3, 2016. https://www.gamasutra.com/view/news/265114/Autodesk_to_lay_off_925_in_transition_to_cloudbased_tools.php.

Rose, Mike. “Autodesk Acquires Bitsquid 3D Game Engine.” Gamasutra, June 9, 2014. https://www.gamasutra.com/view/news/218983/Autodesk_acquires_Bitsquid_3D_game_engine.php.

Rose, Mike. “Autodesk Acquires Cloud Production Company Shotgun Software.” Gamasutra, June 25, 2014. https://www.gamasutra.com/view/news/219712/Autodesk_acquires_cloud_production_company_Shotgun_Software.php.

SimplyMaya. “How Did Autodesk Maya Become so Popular?” Maya Tutorials, Maya 3D Training, Home of SimplyMaya, July 26, 2016. https://simplymaya.com/sm-news-articles/66/how-did-autodesk-maya-become-so-popular?%2F.

Battle Pass

Overview

Battle pass is a monetized system in which players advance through a tiered reward track by completing specific in-game tasks within a limited period, typically referred to as a season. Since emerging in the early 2010s, it has become a widely adopted feature across PC, console, and mobile platforms, appearing in titles with diverse genres, such as *Apex Legends*, *Dota 2*, and *Fortnite Battle Royale*. In many shooter games, battle passes account for an estimated 30 to 60 percent of total earnings (Kim 2025). Battle pass is a trending monetization model in contemporary game economies, especially within free-to-play and live-service games, where it provides a framework for seasonal content updates, maintains player retention, and generates continuous revenue.

Brief History

The origins of battle pass can be traced to the "International 2013 Interactive Compendium" of *Dota 2*, a multiplayer online battle arena game produced by Valve (Ahonen 2022; Dota 2 2013; Petrovskaya and Zendle 2025; Stubbs 2023). Each purchase of the Compendium contributed $2.5 to its prize pool, and as the pool reached designated numbers, players unlocked a range of rewards, such as bonus XP points and cosmetic skins (Dota 2 2013). By the end of the event, the prize pool reached $2,874,380, generating $3,823,140 in revenue (Dota 2 2013; Stubbs 2023).

The success of the Compendium encouraged Valve to further explore this system. Over the next two years, it experimented with similar systems in its first-person shooter games *Team Fortress 2* and *Counter-Strike: Global Offensive* (Wilson 2015; Stubbs 2023). This process was followed by the release of *Dota 2's* "The International Battle Pass" in 2016, which first introduced the term "battle pass" and established a more standardized set of features for it (Dota 2 2016; Stubbs 2023).

The popularization of battle pass occurred with Epic Games' *Fortnite Battle Royale*, which introduced a battle pass system that granted players enough in-game currency to purchase the next battle pass for free if they completed all tiers of the current battle pass (Liu 2022). This cycle contributed to the sale of over five million battle passes on the first day of *Fortnite's* Season 3 in February 2018 (Valentine 2018). *Fortnite*'s success led numerous other games to adopt and adapt battle passes (Stubbs 2023).

Structure

The core structure of a battle pass is its tier-based track system. Most battle passes are organized into a free track and a premium track. The free track allows players to acquire rewards by playing the game, with no additional costs. Purchasing the premium track, usually with real-world currency or, sometimes, in-game currency, grants access to more tiers and more valuable

rewards. Premium tracks also often include XP boosts that accelerate progression (Liu 2022; Stankovic 2021).

Early battle passes consist of linear progression tracks in which tiers were unlocked sequentially (Kim 2025). Later, more structural variations of battle pass emerged. Some games enhanced customization. *Fortnite* applied a “page-based system” that allows players to choose which rewards to unlock within a set of pages (Kim 2025). Other games implemented “multi-track systems.” Riot Games’ *Valorant*, for instance, included character-specific tracks that unlock in-game items tied to individual characters (Kim 2025).

Across all variations, battle passes operate through two key components: tasks and rewards. Tasks serve as the primary mechanism through which players unlock higher tiers. They are often tied to gameplay, such as playing certain characters. Some tasks extend beyond core gameplay, as in *Fortnite*, where tasks could be to find specific map locations (Liu 2022). To control the pace of completing a battle pass, tasks vary in difficulty and refresh rate. Daily tasks are easier to complete and motivate players to log-in every day. Weekly tasks and seasonal tasks are harder and help late-arriving players to catch up (Galyonkin 2023; Liu 2022).

Rewards are equally important as tasks. They can be divided into direct and indirect rewards (Liu 2022). Direct rewards include in-game items that players can immediately use, such as cosmetic skins or gameplay-affecting items like weapons (Stankovic 2021). Indirect rewards generally take the form of in-game currency, which can be used to buy cosmetics or, in some games, purchase the next season’s battle pass (Liu 2022). Rewards are usually organized hierarchically. Higher-tier rewards tend to be more valuable than lower-tier rewards.

Monetization

A battle pass’s primary source of revenue comes from the purchase of its premium track, which typically costs around $5 for mobile games and $10 for PC games (Kim 2025). Although there are little industry-wide data on total battle pass earnings, reports from individual titles signify that it has become a widely used monetization model in the current game industry. Sensor Tower, a mobile analytics company, reported that the mobile strategy game *Clash of Clans* launched its battle pass at a price of $4.99 and saw its revenue increase by approximately $27 million during the first week after release, which is an increase of 145 percent compared to the previous week (Nelson 2019). In the United States, sales of the battle pass pushed the game to the first on the App Store’s overall grossing chart for the first time since 2017 (Nelson 2019). On PC, Valve reported that *Dota 2* generated roughly $300 million from its battle pass in 2022 (Kessler 2023). The success of these two titles, despite belonging to different platforms and genres, demonstrates battle pass’s flexibility and capacity to generate substantial revenue.

Compared to other monetization models, battle pass offers stable engagement. In their analysis "$126 Million and Counting: Fortnite, How Do They Do It?," Adam Telfer and Joseph Kim highlighted how this advantage of battle pass contributes to its strong long-term monetization. They compared *Fortnite*, which relies primarily on battle pass, with two other free-to-play games, *Knives Out* and *Rules of Survival*, both of which rely on cosmetic gacha systems (Telfer and Kim 2018). The analysis shows that *Fortnite's* lifetime average revenue per install (ARPI) is $0.88 higher than *Rules of Survival* and slightly below *Knives Out* (Telfer and Kim 2018). *Fortnite's* estimated lifetime value (LTV) is greater than both games (Telfer and Kim 2018). Although Telfer and Kim's calculations are approximate, the comparison suggests that battle pass provides competitive per-user revenue and sustained economic performance.

Controversies

Battle pass's time-limited progression structure model has generated controversy. A major criticism concerns the pressure it places on players through what is often described as fear of missing out (FOMO). The Season 1 battle pass of the first-person shooter game *The Finals* lasts roughly three months but is estimated to require nearly 59 days of consistent completion of all daily and weekly challenges, causing players to complain feeling stressed (Norris 2023). Games that attempt to reduce FOMO have faced similar concerns. The first-person shooter game *Halo Infinite* introduced an untimed battle pass, yet its progression rate was so slow that unlocking even a single tier could demand significant grinding and often push players to alter their playstyle purely to satisfy the tasks, causing criticisms about excessive engagement expectations (Clayton 2021).

Controversy also arises from the monetization of the premium track, which contains more desirable rewards, creating implicit pressure to pay. In 2022, the hero shooter game *Overwatch 2* announced that the new hero Kiriko was immediately available to premium track purchasers but required non-paying players to reach tier 55 of the battle pass (King 2022). This design can be considered as a form of soft pay-to-win by granting paying players earlier access to heroes than non-paying players.

-Y.W., Fall 2025

References

Ahonen, Aleski. 2022. "Player Perceptions of Loot Boxes and Battle Passes: Exploring How Monetization Strategies Have Affected Player Perceptions of Monetization." https://trepo.tuni.fi/bitstream/handle/10024/139478/AhonenAleksi.pdf?sequence=3.

Clayton, Natalie. 2021. "Sorry, Halo Infinite, but Your Battle Pass Sucks." *PC Gamer*. https://www.pcgamer.com/sorry-halo-infinite-but-your-battle-pass-sucks/.

Dota 2. 2023. "Learning from the Past, Looking to the Future." *Steam*. https://steamcommunity.com/games/dota2/announcements/detail/6252732681186068105.

Dota 2. 2016. "The International Battle Pass." *Dota 2*. https://www.dota2.com/international2016/battlepass/.

Dota 2. 2013. “The International - Interactive Compendium.” *Dota 2*. https://www.dota2.com/international2013/compendium/.

DotaCinema. 2013. “Dota 2 International 2013 Interactive Compendium.” *YouTube*. https://www.youtube.com/watch?v=g5wwEeu1T8E.

Friman, Fredriksson, and Ola Zätterlund. 2023. “The Dark Patterns of Battle Passes: Investigating Player Attitudes to a Growing Type of Microtransaction.” *Digitala Vetenskapliga Arkivet*. https://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1776593&dswid=3275.

Galyonkin, Sergiy. 2023. “Battle Pass Fundamentals.” *Medium*. https://galyonk.in/battle-pass-fundamentals-309efd9975a8.

Grguric, Mihovil. 2021. “Battle Pass: Examples in Top-Grossing Games & Best Practices.” *Udonis*. https://www.blog.udonis.co/mobile-marketing/mobile-games/battle-pass#h2-1.

Joseph, Daniel. 2021. “Battle Pass Capitalism.” *Journal of Consumer Culture*. https://doi.org/10.1177/1469540521993930.

Kessler, Ana. 2023. “Valve Reportedly Generated Nearly $300M from 2022 Dota 2 Battle Pass.” *80lv*. https://80.lv/articles/valve-generated-nearly-usd300m-from-2022-dota-2-battle-pass.

Kiiski, Erno. 2018. “What’s the Big Deal with Battle Pass?” *GameRefinery*. https://www.gamerefinery.com/whats-the-big-deal-with-battle-pass/.

Kim, Joseph. 2025. “Understanding Battle Pass Game Design.” *GameMakers*. https://www.gamemakers.com/p/understanding-battle-pass-game-design.

King, Jade. 2022. “Overwatch 2 Is Already Making Some Weird Mistakes with Its Battle Pass.” *TheGamer*. https://www.thegamer.com/overwatch-2-season-one-battle-pass-kiriko/.

Liu, Yongcheng. 2022. “Revewing the Reasons for the Success of Battle Pass.” *Game Developer*. https://www.gamedeveloper.com/game-platforms/revewing-the-reasons-for-the-success-of-battle-pass.

Nelson, Randy. 2019. “Clash of Clans Earns $27 Million in One Week as Revenue Grows 145% Following Season Pass Debut.” *SensorTower*. https://sensortower.com/blog/clash-of-clans-gold-pass.

Norris, Rory. 2023. “It Takes 59 Days’ Worth of Challenges to Beat the Finals’ Battle Pass.” *The Loadout*. https://www.theloadout.com/the-finals/battle-pass-season-1.

Petrovskaya, Elena, and David Zendle. 2025. “The Battle Pass: A Mixed-methods Investigation into a Growing Type of Video Game Monetisation.” *OSF Preprints*. doi:10.31219/osf.io/vnmeq_v2.

Saed, Sherif. 2017. “Fortnite Battle Royale Gets Dota 2-Style Battle Pass, Loads of New Items.” *VG247*. https://www.vg247.com/fortnite-battle-royale-gets-dota-2-style-battle-pass-loads-of-new-items.

Sowole, Melinda. 2023. “Unlocking the Battle Pass: Broadening the Scope of Video Game Gamification.” *Digitala Vetenskapliga Arkivet*. https://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1774074&dswid=8104.

Stankovic, Stanislav. 2021. “Designing Premium Pass Systems in Games.” *Medium*. https://uxdesign.cc/battle-pass-systems-d3e36ae11f72.

Stubbs, Mike. 2023. “It’s Been 10 Years since Valve Invented the Battle Pass and Changed Gaming Forever.” *PC Gamer*. https://www.pcgamer.com/its-been-10-years-since-valve-invented-the-battle-pass-and-changed-gaming-forever/.

Telfer, Adam, and Joseph Kim. 2018. "$126 Million and Counting: Fortnite, How Do They Do It?" *Deconstructor of Fun*. https://www.deconstructoroffun.com/blog/2018/4/21/aegai526kyjvsn69xm6uc2x02we48x.

Valentine, Rebekah. 2018. "Fortnite Sold 5 Million Battle Passes on the First Day of Season 3." *GamesIndustry.biz*. https://www.gamesindustry.biz/fortnite-sold-5-million-battle-passes-on-the-first-day-of-season-3.

Wilson, Nick. 2015. "Team Fortress 2'S Gun Mettle Update Adds CS:GO like Weapon Skins and Campaigns." *PCGamesN*. https://www.pcgamesn.com/team-fortress-2/team-fortress-2s-gun-mettle-update-adds-csgo-like-weapon-skins-and-campaigns.

Battle Royale (genre)

Overview

Battle Royale is a video game genre that has become relevant in the past decade, more so in the past two years with the influx of Battle Royale games being produced. It is a genre that involves a free-for-all battle that is usually played as a first-person shooter game with the objective being to survive and be the last one standing.

Gameplay Concept

A Battle Royale game consists of six major prerequisites. First, it requires a large map that players are dropped on from above. Second, there is a “storm,” or a barrier, that slowly shrinks on the map in order to force remaining players to interact with one another. Players will take continuous damage if caught behind the barrier when they do not make it to the designated play area in time. Third, every player starts with nothing at the beginning of each round and are left to scavenge for necessary material such as weapons, ammo, or medicinal equipment. Fourth, every battle royale game has a unique aspect to it; Fortnite has integrated the aspect of “building” things such as platforms or stairs to assist players while PUBG has an element of realism. Fifth, scattered throughout the map are caches and chests that contain higher-quality supplies that can benefit the player. Finally, the last person or team standing wins the round (Hornshaw 2019). There is anywhere from sixty to one-hundred players either as soloists or on teams of two to four battling to be the last man or last group standing.

Video games under this genre include: Playerunknown’s Battlegrounds (March 2017), Fortnite (July 2017), Apex Legends (February 2019), Z1 Battle Royale (February 2018) (formerly known as H1Z1), The Culling (2016), Call of Duty: Black Ops 4 (2018), and others created by smaller and lesser-known developers and publishers, such as Realm Royale, Totally Accurate Battlegrounds, Knives Out, etc. Many of these games tend to be free-to-play or sold at a fixed price. Battle Royale games are playable on all gaming platforms available, including console (PlayStation, Xbox, Nintendo Switch), PC, and even mobile.

History

The term “Battle Royale” comes from the Japanese film Battle Royale, directed by Kinji Fukasaku and released only in Japan in 2000. The film takes place in a dystopian Japan where a law known as “The Battle Royale Act” is passed, allowing the government to send middle school-aged children to an abandoned island and fight to the death in order to control the rebellious youth (Battle Royale 2000). Many of the rules established within the film have been adopted into these video games such as a time limit or having to scavenge for supplies (Green 2018). The film itself was based on a novel of the same title, written by Koushun Takami and published in 1999 (Ito 2006).

The genre itself was popularized through the game DayZ, a mod created through Arma II (2009) and developed by Bohemia Interactive. The objective of the game is to survive in a server of sixty total players in a fictional world where there has been a zombie outbreak. However, it isn’t until Brendan “Playerunknown” Greene creates King of the Kill and later Playerunknown’s

Battlegrounds when the genre becomes mainstream. Greene also credits DayZ and Arma II as the games that inspired him to create mods (Hall 2017).

Brendan Greene is the creator of the game Playerunknown's Battlegrounds, the game that kicks off the genre and popularized it to other major and minor developers. He first creates a game that is later known as King of The Kill, a mod based off of H1Z1. Due to the immense popularity of the mod, Greene was contacted by John Smedley, who was the CEO of Sony Online Entertainment at the time via Twitter to offer him a position as a consultant and to further develop King of the Kill (Hornshaw 2019). Afterward, Greene leaves Sony to work with the South Korean video game development company Bluehole Studios to develop his own game, Playerunknown's Battlegrounds (PUBG), which was released on March 23rd, 2017 (Feldman 2017).

Just four months after the release of PUBG, Epic Games releases their own version of the game known as Fortnite. This free-to-play version has the unique element of the collection of materials for the construction of walls, stairs, etc. to create shelter. Both Fortnite and PUBG have become the faces of the genre with a cultural clash between loyal fans of the games (Hall 2017). Ever since the popularity and success of these games have been evident, there has been a large influx of battle royale games being developed and published.

The success of the Battle Royale genre

Bluehole Studios hit one million copies sold in just sixteen days after the release date, and in May of 2017, they had sold two million copies total. PUBG Corp earned $920 million in revenue and $311 million in profit for 2018. Majority of earned revenue was through PC, as they earned $790 million, followed by mobile and earning $65 million, then through console with $58 million (Valentine 2019). It is speculated that mobile earnings were lower than anticipated due to the fact that PUBG mobile was both developed and published by Tencent Games.

Epic's Fortnite was even more successful than its rival PUBG, earning $2.4 billion in revenue in 2018 (Handrahan 2019). They had just over ten million downloads within the first week of release with 15 million players in just the first month (Anderson 2019). SuperData has even cited Fortnite as a major influencer in increasing digital revenue, especially within mobile gaming. The business model found most successful was free-to-play, which Fortnite was the first of the genre (Handrahan 2019). As of March 2019, there are 250 million players on the game.

The most recent and large battle royale game is Apex Legends, developed by Respawn Entertainment and published by Electronic Arts and released in February of 2019. Apex has surpassed Fortnite in downloads within the first week, reaching 25 million, 15 million more than Fortnite in their first week of release. They also had 35 million more players in the first month than Fortnite had, reaching 50 million (Anderson 2019). Apex also has adopted the free-to-play business model with microtransactions within the game.

Developers and publishers are not the only ones benefiting from the success of these games. Twitch celebrity Tyler "Ninja" Blevins's Twitch channel reached 218 million hours watched in 2018 with the majority of his content being him streaming Fortnite (Handrahan 2019). Ninja makes $500,000 a month through streaming games, mainly Fortnite, on Twitch and YouTube.

When Ninja collaborated with famous rapper Aubrey “Drake” Graham they together collected 635,000 concurrent viewers on Twitch (Iqbal 2019).

If you search “Battle Royale” in Steam, you will find more than 400 search results appear. Games like Apex Legends is one of the most recent battle royale games to be developed and published by a large company and their statistics only prove the continuous increase in popularity of the genre over the past two years. The amount of success found in the genre is overwhelming, and one can continue to expect the influx of battle royale games to continue within the industry. In combination with the genre and the free-to-play business model that the majority of games in the genre adopt, alongside the viewership the streamers and competitive players amass, the likelihood of seeing games like Fortnite dying out is unlikely in the next several years.

-E.G., Spring 2019

References

Anderson, Tyler. “Apex Legends v Fortnite: The Battle for Battle Royale.” BBC News. March 05, 2019. Accessed May 04, 2019. https://www.bbc.com/news/newsbeat-47211771.

Battle Royale. Directed by Kinji Fukasaku. Tokyo: Toei Company, 2000

"DayZ." *Bohemia Interactive.* Accessed May 2, 2019. https://www.bohemia.net/games/dayz.

Feldman, Brian. "How PlayerUnknown Created the Biggest Gaming Phenomenon of the Year." Intelligencer. December 12, 2017. Accessed May 1, 2019 http://nymag.com/intelligencer/2017/12/playerunknowns-battelgrounds-brendan-greene-interview.html

Green, Dylan. "A Timeline Of The Battle Royale Game Mode." Dorkly. June 18, 2018. Accessed May 1, 2019. http://www.dorkly.com/post/86647/battle-royale-games.

Hall, Charlie. "PUBG and Fortnite's Argument Raises the Question: Can You Own a Genre?" Polygon. September 22, 2017. Accessed May 1, 2019. https://www.polygon.com/2017/9/22/16350170/pubg-fortnite-battle-royale-genre-opinion

Handrahan, Matthew. "Fortnite Tops SuperData's 2018 Chart with $2.4 Billion Digital Revenue." GamesIndustry.biz. January 16, 2019. Accessed May 04, 2019. https://www.gamesindustry.biz/articles/2019-01-16-fortnite-tops-2018-superdata-chart-with-usd2-4b-digital-revenue.

Hornshaw, Phil. “The History of Battle Royale: From Mod to Worldwide Phenomenon.” Digital Trends. April 10, 2019. Accessed April 30, 2019. https://www.digitaltrends.com/gaming/history-of-battle-royale-games/

Ito, Robert. "Lesson Plan: Kill or Be Killed." The New York Times. July 09, 2006. Accessed April 30, 2019. https://www.nytimes.com/2006/07/09/movies/09ito.html

Iqbal, Mansoor. "Fortnite Usage and Revenue Statistics (2018)." Business of Apps. March 25, 2019. Accessed May 04, 2019. http://www.businessofapps.com/data/fortnite-statistics/.

"Royale Video Game Rumble: 'Apex Legends' Smashing 'Fortnite' Records." CNBC. February 20, 2019. Accessed May 04, 2019.

https://www.cnbc.com/2019/02/20/royale-video-game-rumble-apex-legends-smashing-fortnite-records.html.

Valentine, Rebekah. "PUBG Corp Sees $920 Million in 2018 Revenue." GamesIndustry.biz. April 22, 2019. Accessed May 01, 2019. https://www.gamesindustry.biz/articles/2019-04-22-pubg-corp-sees-usd920-million-in-2018-revenue.

"What Are Battle Royale Games?" What Are Battle Royale Games? A Beginner's Guide. Plarium. April 07, 2019. Accessed April 30, 2019. https://plarium.com/en/blog/battle-royale-games/.

Bethesda Softworks LLC

Overview

Bethesda Softworks LLC is an American video game publisher and manufacturer located in Rockville, MD. Founded by Christopher Weaver on June 28, 1986, the subsidiary company began as a division under Media Technology Limited until it was acquired by ZeniMax Media in 1999. Working alongside its own in-house game development team, Bethesda Game Studios, Bethesda Softworks went onto producing award-winning video game series such as *The Elder Scrolls*, *Fallout*, and *Doom* within the last 33 years. As the company continues to experiment with various gaming platforms and genres, Bethesda Softworks mainly prides itself in the game industry for its fantasy role-playing games and emphasis on realistic, dramatic story plots.

Published Games

After releasing its first sports game *Gridiron!* for the Amiga and Atari ST in 1986, Bethesda Softworks has acquired numerous game development studios like Arkane Studios, Tango Gamework, and id Software over the past three decades of its creation. As the company publishes for most consoles, PC's, and mobile devices, its games also cover wide a variety of genres ranging from action-adventure shooter, multiplayer role-play, sci-fi, and more.

Since the mid 1980's, Bethesda Softworks' development teams have been nominated for several awards both in the United States and abroad, accumulating various "Game of the Year" awards from the 2006 and 2011 Spike Video Game Awards and the 2016 BAFTA's for *The Elder Scrolls IV: Oblivion*, *The Elder Scrolls V: Skyrim*, and *Fallout 4*, respectively. Even its first mobile game, *Fallout Shelter,* released in 2015, "quickly became the top downloaded game in 48 countries" (Bethesda Softworks LLC, n.d.) during the first few months of its launch. Over the years, all six of Bethesda Softwork's game development studios have earned its own individual respect and recognition within an eclectic demographic of critics and fans in the game industry.

Bethesda's Advancement to Mobile

Despite its reputation as one of the biggest producers for consoles and PC's and for creating "one of the industry's most respected and accomplished game development studios" (Bethesda Softworks LLC, n.d.), the company officially announced its entrance to the mobile gaming market in 2015.

As the mobile game industry accounts for 45% (estimated to be around $68.5 billion) of the $152 billion global gaming industry, publishers and developers are rapidly finding ways to enter this thriving market through investments and acquisitions (Kaplan 2019). With the number of users predicted to reach more than 2.4 million by 2019 and the amount of time spent on mobile devices increasing to 30 minutes per day, the diverse demographic and lack of barriers to entry undoubtedly entices companies to explore the newly emerging market.

Since 2015, Bethesda Softworks has published several free-to-play mobile games under their leading game series, *Fallout*, *The Elder Scroll*, and *Doom*. As the first iOS and Android compatible game from the company, *Fallout Shelter* generated more than one billion sessions

and over 29 million hours of gameplay solely on iOS within the first month of its launch (Crecente 2015). Similarly, under Bethesda's other acclaimed series, *The Elder Scrolls: Blades* matched *Fallout Shelter*'s popularity accumulating over "$1.5 million in its first month as an early access game on the Apple App Store" and amassing "over 1.3 million players who spend almost $50,000 per day on the game" (Valdes 2019). However, with the game monetizing time, the publisher has been "immensely criticized for its blatant nickle-and-dime F2P tactics" (Strickland 2019) and its push for mobile monetization as it incentivizes users to buy currency through microtransactions to unlock chests at a faster rate.

Regardless of user backlash, in October 2019, Bethesda Softworks announced its acquisition of a Canadian mobile game development company, Alpha Dog Games, widely known to produce make "fun and engaging products for iOS and Android" (Blake 2019). With titles like *MonstroCity: Rampage* and *Wraithborne* behind its name, Alpha Dogs is expected to aid Bethesda's mobile game output and establish the company as a leading producer in the mobile game industry in the upcoming years.

Orion: An Entrance to Cloud Gaming

During the 2019 E3 Conference in Los Angeles, California, Bethesda Softworks publicly announced its entrance into cloud gaming by introducing Orion, a cloud game streaming service meant to optimize performances of demanding games. As Orion "can achieve dramatic latency reductions of up to 20% per frame as well as up to a 40% reduction in required bandwidth" (Bethesda Softworks LLC, n.d.), the service will benefit multiple demographics from gamers, developers, and streaming providers.

For example, all players—regardless of their location from the main data center—will benefit from high-speed performance while developers can easily integrate Orion's SDK (Software Development Kit) into any game, ensuring optimal streaming experience delivery with minimal effort (Bethesda Softworks LLC, n.d.). For streaming providers, not only will they be able to reach larger audience numbers than ever before, but the technology service will also lower the cost in operations and reduce capital investment in data centers (Bethesda Softworks LLC, n.d.).

As Bethesda gears up for Orion's first public trial, the company emphasizes the technology's position and purpose against its potential competitors after its release. Over the past decade, cloud game streaming has gained rapid interest especially among tech giants looking for new opportunities to enter the game industry. Though cloud gaming is not an entirely new concept, the rise in popularity of streaming services and its business models have convinced companies to experiment further past its prior technological and economic constraints (Warren 2019). With Google's launch of Stadia in November 2019 and Microsoft's announcement of Project xCloud set to release in the year 2020, other companies like Walmart, Verizon, and Amazon are also discreetly transforming the game industry and "said to be testing tech that could change the way video games are played, distributed, and sold" (Warren 2019).

In relation to the front-runners in cloud gaming, Orion is designed to complement platforms like Stadia and xCloud by optimizing cloud gaming rather than focusing on hardware solutions. Stated by James Altman, Director of Publishing at Bethesda, "This can be put into any game engine, it can be used with any streaming platform to provide a better experience for any

consumer playing that game on that platform and to deliver it at a lower cost for whoever's serving the data" (Robertson 2019).

As a beta test run, users can sign up for Bethesda's Doom Slayers Club and run the 2016 version of Doom at 60 frames per second, 4K resolution (Robertson 2019). Though Bethesda Softworks has yet to release pricing for the platform, Google Stadia's initial $9.99 per month subscription plan announcement puts some perspective into how the game industry will monetize and distribute cloud game streaming moving forward.

Expansion and Future of Bethesda Softworks

Over the last few decades, Bethesda Softworks and its game studios have exponentially expanded their office locations within the United States and abroad, with offices located in Washington D.C, Austin, Texas, and Montreal, Quebec. In August 2018, the publishing company welcomed the newest addition to the branch, Escalation Studios, based in Dallas Texas in hopes of continuing to expand and strengthen its development capabilities in the upcoming years (Bethesda Softworks LLC, n.d.).

As for the future of Bethesda Softworks' products, the company announced at E3 2019 that it plans to update new features for *Fallout 76* and *The Elder Scrolls: Blades* in addition to releasing new titles from Arkane Studios and Tango Gameworks called *Deathloop* and *Ghostwire: Tokyo*, respectively (Kohler 2019). Furthermore, with Alpha Dog Games' acquisition and Orion's development, it is undoubtable that the company not only strives for optimal game performance, but also holds propensity to tackle the future of the gaming industry industry through mobile gaming and cloud streaming.

Ultimately, Bethesda Softworks and its development studios have no plans of slowing down its production in the upcoming years; as the award-winning game publisher continues to explore and experiment with numerous platforms and genres, the game industry only offers endless opportunities for new discoveries and possibilities.

-H.I., Fall 2019

References

"Bethesda Game Studios Expands With New Dallas Office." 2019. Bethesda. Bethesda Softworks LLC. Accessed December 5. https://bethesda.net/en/article/5S32QmrOEwaQGqsICEAAMS/bethesda-game-studios-expands-with-new-dallas-office.

Blake, Vikki. 2019. "Bethesda Acquires Alpha Dog Games." MCV/Develop. MCV/Develop. October 28. https://www.mcvuk.com/bethesda-acquires-alpha-dog-games/.

Campbell, Colin. 2018. "A Brief History of Bethesda's Many Legal Tangles." Polygon. Polygon. June 28. https://www.polygon.com/2018/6/28/17511658/bethesda-lawsuits-fallout-elder-scrolls-prey.

Crecente, Brian. 2015. "Fallout Shelter Topped 1 Billion Played Sessions in Its First Month, but That's Not All." Polygon. Polygon. August 19. https://www.polygon.com/2015/8/19/9178277/fallout-shelter-stats.

Ginsberg, Steven. 1996. “At Bethesda Softworks, An Emphasis On Cool.” The Washington Post. WP Company. December 23. https://www.washingtonpost.com/archive/business/1996/12/23/at-bethesda-softworks-an-emphasis-on-cool/24d7f055-c228-4568-a674-e9c136d794e5/?noredirect=on.

Hollister, Sean, and Nick Statt. 2019. “Google's Stadia Cloud Gaming Service Is Coming November 19th: Everything You Need to Know.” The Verge. The Verge. November 8. https://www.theverge.com/2019/6/6/18654632/google-stadia-price-release-date-games-bethesda-ea-doom-ubisoft-e3-2019.

Kaplan, Omer. 2019. “Mobile Gaming Is a $68.5 Billion Global Business, and Investors Are Buying In.” TechCrunch. TechCrunch. August 22. https://techcrunch.com/2019/08/22/mobile-gaming-mints-money/.

Kohler, Chris. 2019. “Everything Bethesda Announced At E3 2019.” Kotaku. Kotaku. June 10. https://kotaku.com/everything-bethesda-announced-at-e3-2019-1835362095.

Lee, Julia. 2019. “Bethesda Acquires Mobile Game Company Alpha Dog Games.” Polygon. Polygon. October 24. https://www.polygon.com/mobile/2019/10/24/20930843/bethesda-alpha-dog-games-acquisition.

“Orion.” 2019. Bethesda. Bethesda Softworks LLC. Accessed December 5. https://bethesda.net/en/game/orion.

“Our Studios.” 2019. Bethesda. Bethesda Softworks LLC. Accessed December 5. https://bethesda.net/en/studios.

“Project XCloud (Preview): Xbox.” 2019. Xbox. Microsoft. Accessed December 5. https://www.xbox.com/en-US/xbox-game-streaming/project-xcloud.

Robertson, Adi. 2019. “Bethesda Announces Orion Cloud Gaming System, with Beta Later This Year.” The Verge. The Verge. June 10. https://www.theverge.com/2019/6/9/18658796/bethesda-softworks-orion-cloud-gaming-improvement-doom-preview-e3-2019.

Strickland, Derek. 2019. “Elder Scrolls: Blades Made $50,000 per Day since Late March.” TweakTown. TweakTown. April 28. https://www.tweaktown.com/news/65713/elder-scrolls-blades-made-50-000-per-day-late-march/index.html.

Valdes, Giancarlo. 2019. “Sensor Tower - The Elder Scrolls: Blades Pulls in over $1.5 Million on IOS.” VentureBeat. VentureBeat. May 3. https://venturebeat.com/2019/04/26/sensor-tower-the-elder-scrolls-blades-pulls-in-over-1-5-million-on-ios/.

Warren, Tom, and Sean Hollister. 2019. “What Is Cloud Gaming? Google Stadia and Microsoft XCloud Explained.” The Verge. The Verge. June 19. https://www.theverge.com/2019/6/19/18683382/what-is-cloud-gaming-google-stadia-microsoft-xcloud-faq-explainer.

Beyond the Summit

Overview

Beyond the Summit (stylized as BTS) is an Esports production company based in Covina, California. They were officially founded in 2013 by David Gorman (LD) and David Parker (GoDz), although they have operated unofficially under “Beyond The Summit” since 2012. BTS produces and broadcasts professional video game content for both themselves, game developers, and other companies. Their work ranges from commentating and casting to production and graphic design, as well as all the steps in-between (Beyond The Summit).
In the last decade, they have expanded to multiple channels, games, and tournaments every year. These worldwide events include content from *Dota 2*, *Counter-Strike: Global Offensive, Smash Bros Ultimate* and *Melee, Rocket League*, and more, which have their respective BTS channels, and social media outlets. All their content is live streamed on Twitch, and the replays and recaps are posted to YouTube. In a nutshell, Beyond The Summit is to Esports what ESPN is to traditional sports.

Founding

Both Gorman and Parker started as Dota 2 broadcasters, where they would live stream themselves casting the game from their own home. Gorman lived in Philadelphia and Parker in Melbourne. Their expansion was kickstarted when they noticed that Asian Esports events (specifically for Dota 2) were non-existent. They decided to produce the “Gigabyte Dota Masters,” and invited 22 of the top Asia-based *Dota 2* teams, along with some lesser-known teams to give a shot. The event was so successful that they decided to launch an IndieGoGo fundraising page in 2013, where they raised over $38,000 to expand their company production value and reach, as well as moving to Los Angeles to establish their base (Gorman, 2013). They reached their goal, and the first “Summit House" was established. Here, employees both lived and worked in the same space, where they both produced videos and hosted tournaments.

In 2017, they moved into the 2nd “Summit House” located in Los Angeles, which was bigger than the first. This was at the same time they started to produce content and host tournaments for other games besides *Dota 2*; mainly *Smash Bros Melee* and *Counter-Strike: Global Offensive* (About Beyond The Summit). They started to get recognition from bigger sponsors and companies and worked with them to produce non-Summit events for games like *League of Legends* and *Fortnite*. In 2019, they moved into their current base, which is a 20,000 square foot studio.

Company Culture

Beyond The Summit represents competitive gaming and Esports as a cultural form and community, as well as an economic industry. They heavily emphasize community interaction and portray themselves very casually while broadcasting from their studio (Welcome Back - Smash Summit 11). This stems from their pride over long-term relationships that give them the ability to blur the line between being a serious production company and a group of internet personalities (Beyond The Summit). This opens the door for a lot of professional players to show a side of themselves that viewers wouldn't normally see at other non-Summit events. On top of this, they hold side events for their staff, pros, casters, and commentators, and internet celebrities that they also broadcast, which also serve as a behind-the-scenes look of what goes on inside their studio.

Games and Prizes

On their web site's events page, they list every tournament and side event they host. Each tournament event has a Video-On-Demand (VOD), while others have quick recaps of the events, both of which are uploaded on BTS' YouTube channels. This includes their main "Summit" tournament series, which includes *Counter-Strike, Smash Bros Ultimate* and *Melee, Rocket League,* and *Dota 2*. Their "Pro Series" and "Pro Circuit" tournaments are other *Dota* tournaments based in Asia. "Pro Series" is organized by BTS while "Pro Circuit" is hosted by Valve, the creators of *Dota 2* (Stubbs, 2017).

Beyond the Summit operates as a broadcasting or production partner for any tournament they do not run themselves. Along with the revenue from producing, they are sponsored by and partnered with many companies, including MSI, Acer America, and Sennheiser (Acer). They host more companies for ads on their live streams and social media accounts, including the Humane Society, St. Jude Children's Hospital, and other endemic esports products (Beyond The Summit).

Bigger events include the "TI Hub" qualifiers for "The International" tournament, a *Dota 2* tournament hosted by Valve with 20 million dollars on the line (Good, 2018). "Mainstage" is one of the biggest *Smash Bros* tournaments of the year, hosting both *Smash Bros Ultimate* and *Melee*. Prize pools average in-between \$45,000 to \$200,000 for most of these events, major or minor. For example, "Smash Summit 11" had the biggest prize pool in *Melee's* history, with a \$140,000 crowdfunded pool (Michael, 2021). "CS Summit 7" had a \$200,000 prize pool (Bernal, 2021), and "Dota Summit 11" sat at the top with a \$300,000 prize pool (Ramadani, 2019).

Expansion

Currently, BTS has expanded to 3 different teams, production and broadcast, scripted content, and graphic design. Beyond The Summit's scripted content team is called '"Friday Lunch" (Beyond The Summit). Along with creating the VODs and recaps on their website, they make skits and branded content that usually ranges from 1 to 6 minutes and features internet

personalities and professional players that associate with the Beyond the Summit brand. In a Saturday Night Live style, they do parodies of popular movie and TV scenes, game shows, and situations (Allen, 2017). These skits are usually related to upcoming tournaments and are released like advertisements for them. (Sennheiser Sound Man - Smash Summit 8).

Their in-house design team does every tournament logo and overlay for their live stream. The team of animators and digital artists is led by Peter Kerulo and is run from Budapest, Hungary. Additionally, they create BTS and tournament merchandise, social media infographics, and digital edits for promoting their other content. For their stream overlays, they have designed their own "proprietary in-house graphics play-out solution" (Beyond The Summit), called "Tiny.IO". With complete control of their studio and overlays, they can offer branding space virtually everywhere (Beyond The Summit).

Their broadcast and production team works both in and outside their Los Angeles Studio. Besides their events, they produce for other, non-Esports companies. Some examples include *Fortnite* tournaments hosted by Chipotle and Honda and NBA *2K* content hosted by Under Armor (Beyond The Summit). Their 20,000 square foot studio in Los Angeles contains 3 different large studio sets. Inside is competition space, broadcasting, and commentating booths, TV-like set areas, and more. The rest of the space has team rooms for practice, lounges, break rooms, and administrative space. They complete most of their content from pre to post-production in this same space (Beyond The Summit).

Conclusion

Beyond The Summit has not shown signs of stopping or slowing down in 2021. Esports as a whole is easily adaptable to being socially distanced, so when the Covid-19 pandemic hit, most tournaments switched to being both played and cast remotely. Still, 2 *Counter-Strike* tournaments, 4 *Smash Bros* tournaments, and 14 *Dota 2* tournaments or qualifiers were held under the Beyond the Summit name in 2021. They were also nominated for Broadcast/Production Team of the Year at the 2021 Esports Awards. Since their conception, they have reached 20 billion minutes watched and 2.5 billion live stream views. These come from their 16 million peak monthly unique visitors and their 5 million followers total from all their social media platforms (Beyond The Summit).

Their most recent and biggest partnership is with Bayes Esports, a data partner where they'll "be working together to ensure matches have integrity, monitoring match-fixing, and so on," according to founder David Gorman (Studholme, 2021). This data helps viewers gain awareness of BTS events and gives them on-the-go stats during live streams; ultimately a better, more streamlined viewing experience. In a way, this is Beyond The Summit "leveling up" without growing up, and evolving from a group of friends that would host *Dota 2* tournaments in their homes to become a huge part of the ever-growing entertainment industry.

- J.Y., Fall 2021

References

"About Beyond The Summit." YouTube. Beyond The Summit, September 1, 2020. https://www.youtube.com/watch?v=aF-AXHVo4tg&feature=emb_logo.

"About Us." Beyond The Summit. Beyond The Summit. Accessed December 12, 2021. https://beyondthesummit.tv/about.

Allen, Eric Van. "When Dota 2 Does Love Actually Memes." Kotaku. Kotaku, December 16, 2017. https://kotaku.com/when-dota-2-does-love-actually-memes-1821354647.

Bernal, Alan. "Virtus.pro Win CS Summit 7 with Dominant Run: Final Placements & Results." Dexerto, January 31, 2021. https://www.dexerto.com/csgo/csgo-cs_summit-7-teams-stream-schedule-1500434/.

"Broadcast." Beyond The Summit. Beyond The Summit. Accessed December 12, 2021. https://beyondthesummit.tv/broadcast.

"Content." Beyond The Summit. Beyond The Summit. Accessed December 12, 2021. https://beyondthesummit.tv/content.

"Design." Beyond The Summit. Beyond The Summit. Accessed December 12, 2021. https://beyondthesummit.tv/design.

"Events." Beyond The Summit. Beyond The Summit. Accessed December 12, 2021. https://beyondthesummit.tv/events/.

Good, Owen S. "The International Goes to China for 2019 Championships." Polygon. Polygon, August 26, 2018. https://www.polygon.com/2018/8/26/17783452/the-international-2019-dates-china.

Gorman, David. "Beyond The Summit - Esports Studio." Indiegogo. Beyond The Summit, February 9, 2013. https://www.indiegogo.com/projects/beyond-the-summit-esports-studio.

Michael, Cale. "Smash Summit 11 Super Smash Bros.. Melee Singles Tops $140,000 Prize Pool at End of Vote-Driven Crowdfunding." Dot Esports. Dot Esports, July 5, 2021. https://dotesports.com/fgc/news/smash-summit-11-super-smash-bros-melee-singles-tops-140000-prize-pool-at-end-of-vote-driven-crowdfunding.

"Our Mission." Beyond The Summit. Beyond The Summit. Accessed December 12, 2021. https://www.beyondthesummit.tv/our-mission/.

"Powering Esports." Beyond The Summit | Partnerships | ConceptD United States. Acer. Accessed December 12, 2021. https://www.acer.com/ac/en/US/content/conceptd-partnerships-bts.

Ramadani, Cristy. "Summit 11 Minor Kicks off the DPC 2019-2020 Season Tomorrow." GosuGamers. GosuGamers, November 6, 2019. https://www.gosugamers.net/dota2/news/50598-summit-11-minor-kicks-off-the-dpc-2019-2020-season-tomorrow.

"Sennheiser Sound Man - Smash Summit 8." YouTube. Beyond The Summit, June 15, 2019. https://www.youtube.com/watch?v=oV4yycPQsgE.

Stubbs, Mike. “Beyond The Summit On Turning The Summit Into A 'Dota 2' Minor.” Forbes. Forbes Magazine, December 15, 2017. https://www.forbes.com/sites/mikestubbs/2017/12/15/beyond-the-summit-on-turning-the-summit-into-a-dota-2-minor/?sh=216be4f04674.

Studholme, Billy. “Exclusive Interview: Bayes Esports Becomes Exclusive Data Partner of Beyond The Summit.” Esports Insider, February 4, 2021. https://esportsinsider.com/2021/02/exclusive-interview-bayes-esports-becomes-exclusive-data-partner-of-beyond-the-summit/.

“Venue.” Beyond The Summit. Beyond The Summit. Accessed December 12, 2021. https://beyondthesummit.tv/venue/.

“Welcome Back - Smash Summit 11.” YouTube. Beyond The Summit, July 17, 2021. https://www.youtube.com/watch?v=9vu-kqfnx4I.

Bixin App

Overview

The Bixin App, used to be known as the Fish Bubble App, is an E-sports and games social media platform developed by Fish Bubble in 2014 (Bixin). The App was designed for the Chinese Gaming market, especially targeting the Mobile Gamers in Mainland China. The App is essentially a game companion platform which allows gamers to hire other people, usually professional ESports players or game influencers, to play games with them. The App now also includes a forum function for all users to post and share their opinion making it more like a social media platform for the game community. The App is now compatible with most systems including Apple IOS, Android, and PC.

Mechanics

As the Chinese Game Industry evolves and the market matures, the App now refers to the gamers-for-hire as E-Sports Coaches or Personal Game Trainers.

For gamers seeking a Personal Trainer to play with them, all they need to do is log into the software and complete their personal profiles. The profile, which includes their basic skill level, their needs, and the games they play, will allow the software to generate lists of trainers in which they can choose from. Users can also tap on any of the Trainers profile to learn more about the Trainers' rank, experience, and other information. After selecting a Trainer, the user will complete the payment through an online transaction to the platform. However, the transaction is done in Bixin Coins, which is a virtual currency exclusive to the platform. Two U.S dollars can exchange to five Bixin Coins. Once the payment is completed, the user will be able to contact the trainer and start their session of game-play. The cost per game could range from ten to twenty-five Bixin Coins (two to five U.S dollars) per game depending on the trainer.

Trainers on the other hand use the same software, but have to go through the process of registration, which for Bixin App could take around three days. In order to be registered on the platform, the trainers have to upload their photo, a voice memo, and their game records & profile. When officially registered as a trainer on the platform, the trainers simply select the amount of pay they expect to receive and start taking orders. The platform takes 10% of the payment received from the users and the remaining 90% will be added to the trainers' accounts. Depending on the game, trainers can be paid by hour or game. For example, first-person shooting games usually have the pay-per-hour model while MOBA games usually have the pay-per-game model. Other than the set payment amount, after each game or session of play, users can also decide whether they want to tip the trainers through the chat function. However, 40% of the tip will actually go to the platform, leaving only 60% for the trainers.

The Bixin App also features a forum function in which users can follow other users or trainers to see different posts or streams.

Personal Game Trainers

The role of Personal Game Trainers has been standardized by the Chinese Cultural Development Department in 2019 (Chen 2019). On July 31st, Shanghai issued the first official registration for Professional Esports players, on the same day an official documentation of Personal Game Trainer Standards was also issued. This means that from that day, professional Esports players, whether they are influencers or contract gamers, will have the opportunity to be officially recognized by the Chinese government and public by the title of Personal Game Trainer. According to Chen, there will be three levels of Personal Game Trainers, Beginner, Intermediate, and Professional, based on the gamers' skills as well as evaluation through the committee.

The concept of Personal Game Trainer has existed since the release of the Bixin App. Gamers of various games, whether PC games or Mobile games (Console gaming is not huge in China,) seek the help of more skilled gamers with skill-building, ranked games, or just for the pleasure of having a companion. While the development of this new career satisfies the needs of game consumers, it also provides the opportunity for more and more skilled game players to start a living out of it. This includes contract or league players as well as any skillful gamers.

Reflection of Chinese Esports Market

Although China is relatively late to the global Video Games and ESports Market, its recent growth has surpassed many leading countries like the U.S, Japan, and South Korea, becoming one of the world's leading forces in game development (Wang 2019). As mentioned in the previous section, the Chinese government is aiming to aid the growth of the industry by signing official documentations regarding Esports Standards and also permitting the release and development of new games as well as Esports teams. Set professional Esports teams and PC gaming aside, a whopping 75% of the Chinese online population is participating in the mobile gaming industry (NewZoo 2015). The number will and is growing continuously in the next few years. According to New Zoo's Global Games Market Report, the Asian-Pacific regions will generate 47% of the global game revenue (NewZoo 2019). This is after the effects of new screen time policies for minors and the licensing freeze in China. This means that China, along with other Asian Pacific countries, plays a huge role in leading the global game revenue and industry in all.

Since Bixin App made its debut in the Gaming Industry in China, it has steadily grown up the Apple App Store's top LifeStyle category. Its current place is at 19 in the Chinese App Store and its highest rank was in third place. According to the Bixin Official website, there are over three-million registered trainers on the platform and even more users. The Chinese government's decision to standardized the Chinese Esports industry reflects the huge potential China has in the

industry. China's decision of standardizing Personal Game Trainers and issuing the official registration for Professional Esports players is also a move to motivate more young and potential gamers to enter the Esports Industry. This movement will provide opportunities for major Chinese Esports Leagues to seek out new potential players to train for and Bixin App is currently taking the lead in such "youth-training" programs through its platform (创业邦公**众号** 2019).

Competition and Future Developments

Bixin's success had led many developers to come up with their own versions of the game companion platforms. While there are multiple platforms existing in China today, they all take similar forms as Bixin. One interesting platform, which is called E-pal.gg (used to be E-girl.gg), is partnered with Discord. The platform is still new and there isn't much information on the platform. But as the platform experiences with its Western user base and culture, it will be interesting to see how the platform evolves and grows. Compared to the Chinese platforms, E-pal.gg is not officially regulated and anyone can sign up to be a game companion.

While the platforms' future developments seem promising and will likely have a large impact among the Chinese youth gamers, it is still controversial as most people on the platforms hire opposite gender trainers. This causes many ethical controversies and debates about whether platforms like Bixin App is becoming a dating platform rather than a socialization platform for gamers (Marks).

- Y. R., Spring 2020

References

Chen, Jun. "这是中国电竞的创新！有一种职业叫：电竞陪练师." 澎湃新闻, November 9, 2019. Accessed May 13, 2020. https://news.sina.cn/2019-11-09/detail-iicezzrr8361329.d.htmal

E-pal. Accessed May 13, 2020. https://www.epal.gg/detail/330.

Mark, Andrews. "Apps Allow You To Play with Cute Chinese Gamers With a Fee." Elite Readers. Accessed May 13, 2020. https://www.elitereaders.com/china-game-companion-apps/

Shen, Xinmei, and Xinmei Shen. "You Can Pay Gamers in China to Play PUBG with You." Abacus. Accessed May 13, 2020. https://www.abacusnews.com/digital-life/you-can-pay-gamers-china-play-pubg-you/article/3001069.

"The 2015 GMGC Global Mobile Games industry whitebook". NewZoo, 2015. Accessed May 13, 2019. http://www.newzoo.com/insights/the-2015-gmgc-global-mobile-games-industry-whitebook-is-now-available/.

Wang, Yan. "《中国电子竞技产业发展分析报告》出炉：揭开中国成为全球第二大电竞市场的奥秘." 文汇网, November 23, 2019. Accessed May 13, 2020. http://www.gtcom.com.cn/?c=news&a=view&id=1293

"2019 Global Games Market Report." NewZoo, 2019.

"比心APP五周年成绩单：服务数千万用户，创造百万就业机会." 创业邦公众号, July 22, 2019. Accessed May 13, 2020. https://www.chinaz.com/manage/2019/0722/1033206.shtml.

比心陪练. Accessed May 13, 2020. https://www.bxapp.cn/.

Blizzard Entertainment, Esports, Overwatch League

Overview

Overwatch League is a professional competitive esports league of the team-based first person shooter game Overwatch. It is produced and run by the game's developer and publisher Blizzard Entertainment and the professional esports organization Major League Gaming Corp., the subsidiaries of Activision Blizzard (Crecente 2018). Ovewatch League is considered as the highest tier competitive league in Overwatch esports, referred as it is "designed to celebrate only the best of the best" (Overwatch, n.d.). Overwatch Open Division, Overwatch Contenders Trial, and Overwatch Contenders act as the subordinate regional professional competitive leagues for professional players, and those opportunities in subordinate leagues to exhibit players' skills in order to be scouted to the Overwatch League is called the 'Path to Pro.' Each OWL team can have its own affiliated regional Overwatch Contenders team, known as the 'academy team.'

Structure

Overwatch League is "the first major global professional esports league with competition organized by cities," with 20 teams each representing a city across 3 continents—5 teams in Asia, 13 teams in North American, and 2 teams in Europe—as of 2020 (Blizzard Entertainment 2018). OWL was formed by Activision Blizzard selling team franchises, and franchises then can hire players and provide benefits while making money through standard revenue streams like advertising and merchandise (Crecente 2018). It has been known that first 12 franchises of the Overwatch League inaugural season has paid $20 million each to Activision Blizzard for those franchise spots to represent the city, with 8 expansion teams that entered the league at the second season in 2019 were estimated to have paid $30 million to $60 million (Wolf 2018). In their third season in 2020, 20 teams in OWL is divided to Pacific and Atlantic Conferences, and further split into four divisions of Atlantic North, Atlantic South, Pacific East, and Pacific West, initiating homestand games in every team's own arena in representative cities (Blizzard Entertainment 2019). Each team will host two homestands, and will each play 28 matches all across the world, in-conference opponents twice and out-of-conference teams once (Blizzard Entertainment 2019).

Production

The production of Overwatch League and its subordinate professional leagues is able to be directly managed by Blizzard Entertainment, "since the game is newly launched, [the game's esports scene] doesn't have an existing ecosystem and we can really design our league upfront in a way that's best for players and teams," as Michael Morhaime, the company's president and co-founder, quoted in 2016 (Szymborski 2016). Designing this centralized organization of the Overwatch League was conducted efficiently not only because the preexisting third-party regional leagues were not extended worldwide as OWL, but also Activision Blizzard put effort on dominating regional leagues through establishing in-house production system. The announcement of launching OWL was made at 2016 Blizzcon, only about months after Overwatch's official release and Activision Blizzard's purchase of Major League Gaming as a

move to handling competitive gaming media production in-house rather than through third party organizations (Taylor 2018, 199-200). Subsequently, Blizzard had ended the contracts with organizers of preexisting third-party regional professional Overwatch organizers, such as OGN of Korean Overwath APEX and Banana Gaming & Media of Chinese Overwatch Premier Series, and began in-house production of Overwatch Contenders / Contenders Trial / Open Division directly (Contenders Korea through Blizzard Entertainment Korea from 2018) or through their local partnerships (Contenders China through local publishing partner NetEase from 2018) and subsidiaries (Contenders NA and EU through MLG from 2017) (Barrett 2018). Through these movements, professional Overwatch gaming scene was centralized into Overwatch League and current Path to Pro system.

Sportification

Blizzard Entertainment aims to combine Blizzard's esports pedigree with the best practices of major professional sports, creating long-term stability for teams as well as opportunities for players to establish the types of professional careers associated with traditional sports (Blizzard Entertainment 2016). Stepping further from just attaching franchises to cities, OWL has sealed its plan to be the first major esports league to feature a city-based, home-and-away model in teams' own venues for its competitions from 2020 season (Hume 2019). Nate Nanzer, former Commissioner of OWL commented on the localization to foster support from local fanbase that it will "[create] a stronger bond between the fans, the teams and the players" and also "unlock [local] revenue streams for esports teams that exist for traditional sports teams but don't exist in today's esports ecosystem" (Szymborski 2016). Later, Nanzer added that "[Teams in traditional sports drive revenue] because they have a venue. They can sell tickets, VIP experiences and boxes and all of those things … which to date have had no reason to invest in esports," and emphasized that "the goal is to build this over time," echoing the goal of a long-term stability as a professional sports with local city-based franchises (Hume 2019).

Also, OWL implemented the traditional sports' 'home team uniform' concept to in-game skins, to act like jerseys when teams face off in league plays and can be purchased by Overwatch users to apply in their own games. "Just like with traditional sports jerseys, purchasing Overwatch League skins will provide monetary support for teams in the league," quoted Nanzer in the OWL skin announcement video (Blizzard Entertainment 2017a). Furthermore, Nanzer expected this to create a fan environment under the 'team pride' analogous to that of traditional sports, extending the mechanism of traditional sports to the esport's distinct realm of cyberspace (Blizzard Entertainment 2017a).

On the other hand, providing career stability as that of other traditional professional sports is an important goal for OWL. Blizzard Entertainment in OWL website announced that teams are required to include these benefits for players:

- One year guaranteed contracts with the option to extend the contract for an additional year
- The minimum salary in USD $50,000 per year
- Health insuarance and a retirement savings plan
- Direct distribution of at least 50% of their team performance bonuses (Blizzard Entertainment 2017b).

Criticisms on 'Path to Pro'

However, Activision Blizzard is criticized by not efficiently supporting 'Path to Pro,' which resembles NBA G League's format of developing talent and fostering an environment that gets talents under the spotlight of OWL (Garst 2019). As from the introduction of OWL affiliated academy teams, Overwatch Contenders has become a mix of academy teams and unassociated teams, and the people of those unassociated teams are expressing concerns of getting "no support whatsoever" (Carpenter 2018a) in managing their teams, saying "the league isn't working for you if you're in an unsigned team since it's built to facilitate academy teams" (Garst 2019). It is also reported that Overwatch Contenders and Contenders Trial players are not being properly paid their salaries from their team (Carpenter 2018b) or even the prize money from Blizzard Entertainment, adding difficulties for players continuously pursue their career (Richman 2019). Also, according to Contenders coach Ridouan "ioStux" Bouzrou's Reddit post, those "prize pools in Contenders are laughable. You could be a 6 man team winning every single map of every season in a year, and you would still have to take a part-time job to pay the bills" (Bouzrou 2018). He further mentions it's hardly possible for Contenders team themselves to search for own sponsorships to compensate the lack of financial support from Blizzard, as Overwatch Contenders Official Rules Version 2.0 regulates "teams and players will not be permitted to feature sponsorships in these "reserved" categories in connection with their participation in Contenders," including video game platforms, athletic wear / apparel, beverages, payment services, and even computer monitors, CPUs and graphic cards (Bouzrou 2018). In contrast to the vision of stable long-term revenue models similar to those of traditional sports for both teams and players in OWL, these testimonies by 'Path to Pro' participants show that the Blizzard Entertainment is having a hard time fulfilling the vision of sustainability in subordinate leagues, where is meant to be the grassroots of fostering the future talents of the Overwatch League.

-J.N., Fall 2019

References

Barrett, Ben. 2018. "Overwatch APEX, the game's premier tournament, has been cancelled" *PCGamesN*, January 5, 2018. https://www.pcgamesn.com/overwatch/overwatch-apex-season-5-cancelled.

Blizzard Entertainment. "Blizzard Entertainment Establishes Professional Sports League for Overwatch." November 4, 2016. https://blizzard.gamespress.com/Esports-Overwatch#?tab=Press-releases-0.

Blizzard Entertainment. "Overwatch League Inaugural Season Begins Today." January 10, 2018. https://blizzard.gamespress.com/Esports-Overwatch#?tab=Press-releases-0.

Blizzard Entertainment. 2017. "Overwatch League Skins Arriving Early Next Year." *Overwatch League*, December 4, 2017. Video, 1:44. https://overwatchleague.com/en-us/news/21275547.

Blizzard Entertainment. 2017. "Player Signings, Salaries, and More in the Overwatch League." *Overwatch League*, July 26, 2017. https://overwatchleague.com/en-us/news/20937016.

Blizzard Entertainment. 2019. "Homecoming; What's New In 2020." *Overwatch League*, July 16, 2019. https://overwatchleague.com/en-us/news/23059433/.

Bouzrou, Ridouan (u/ioStux). 2018. "I'm XL2 Coach ioStux, I walked the Path to Pro, here's why it's a complete mess." Reddit, June 12, 2018.

https://www.reddit.com/r/Competitiveoverwatch/comments/8ydpiy/im_xl2_coach_iostux_i_walked_the_path_to_pro/.

Carpenter, Nicole. 2018. "EnVision drops its Overwatch team." *Dot Esports*, June 26, 2018. https://dotesports.com/overwatch/news/envision-releases-overwatch-team-15126.

Carpenter, Nicole. 2018. "Former EnVision owner reportedly owes team thousands of dollars." *Dot Esports*, August 17, 2018. https://dotesports.com/overwatch/news/former-envision-owner-reportedly-owes-team-thousands-of-dollars.

Crecente, Brian. 2018. "'Overwatch': Birth of a Professional Esports League." *Rolling Stone*, February 28, 2019. https://web.archive.org/web/20180302164742/https://www.rollingstone.com/glixel/features/overwatch-birth-of-a-professional-esports-league-w517207.

Garst, Aron. 2019. "After three seasons, Overwatch Contenders' problems haven't been solved." *HeroesNeverDie*, February 25, 2019. https://www.heroesneverdie.com/2019/2/25/18239998/overwatch-contenders-overview-tier-two-esports.

Hume, Mike. 2019. "Overwatch League announces city-based, home-and-away matches will start in 2020" *The Washington Post*, March 15, 2019. https://www.washingtonpost.com/sports/2019/03/15/overwatch-league-announces-city-based-home-and-away-matches-will-start/.

Overwatch. n.d. "Overwatch Esports." Accessed December 6, 2019. https://playoverwatch.com/en-us/esports.

Richman, Olivia. 2019. "Overwatch Contenders player Phaz reportedly unpaid for Trials." *Win.gg*, March 7, 2019. https://win.gg/news/715/overwatch-contenders-player-phaz-reportedly-unpaid-for-trials.

Szymborski, Dan. 2016. "Blizzard to create professional Overwatch League" *ESPN*, November 4, 2016. https://www.espn.com/esports/story/_/id/17968297/blizzard-announces-professional-overwatch-league.

Taylor, T.L. 2018. *Watch Me Play: Twitch and the Rise of Game Live Streaming*. Princeton: Princeton University Press.

Wolf, Jacob. 2018. "Sources: Overwatch League expansion slots expected to be $30 million to $60 million" *ESPN,* May 10, 2018. https://www.espn.com/esports/story/_/id/23464637/overwatch-league-expansion-slots-expected-30-60-million.

Boosting

Overview

Boosting, or Elo Boosting refers to the process by which a player can pay to improve their ranking in a game. This is usually done by hiring a more skilled or professional player to play on behalf of the less-skilled player (Riot Games 2013). It's ultimately a form of cheating in video games. While cheating in video games can date back to the coin-operated arcade game – Computer Space – in 1971, boosting only became known to the public in 2009, after the launch of League of Legends (LoL) (Hayward 2020). The Elo ranking system introduced by LoL was considered a fresh idea then, which provided players an excellent medium to determine their skill levels compared to the millions of gamers across the world (Jealous Computers 2021).

The Elo ranking system is used in every Multiplayer Online Battle Arena (MOBA) game like DOTA 2, Overwatch, and CSGO. And as more MOBA games get released and become popular, boosting industry growth rapidly. The competitive nature of the MOBA game incentivizes players to rank up in the game to show off their skills and to have higher social status in the online community (Tichon and Makaresz 2019). While convenient for players, boosting raises ethical considerations with regard to in-game fairness. However, despite its legitimacy, the boosting industry has become a mature industry that made over $170 million in the single year of 2019, according to a report from the University of Limerick (Branson 2009).

Monetary Structure

There are hundreds of companies dedicated to providing boosting services. Through those websites, players can directly pay another more expert player to boost their accounts by choosing the game, current and desired level of the account, and any add-on services like boosting while streaming or priority order. Then based on the selections, the websites will calculate the price and time needed to complete the boost. The price varies from the website. Prominent websites usually charge at a high rate since they have better and more professional players to play for them, whereas smaller websites charge less and pay less.

For example, the top 1 boosting website on google "Royal Boost" charges 18$ to boost one gold rank (Royal boosting 2021), while a smaller website called "Team Flight boosting" only charges $5 for the same service (Teamfight Boosting 2021). The price surges as the desired rank goes higher. For a Diamond or Master level boosting, the prices can go as high as a thousand dollars. Take the Royal boosting website as an example, it would cost $1216 to boost from the lowest level (Iron Division VI) to the highest level possible (Master division I). Another factor that impacts the price is the location of the server. Players in North America, West Europe, and Korea tend to cost more than the rest of the world.

These boosting websites serve as a platform to connect buyers and boosters. Boosters will have a dashboard showing all the orders and the price so they can choose which order they want to play. However, while the buyer pays a lot for a game, the boosting websites take a high portion of earnings through each transaction. On average boosters only get about $5.6 per game on average after the 20% ~ 60% cut taken by the companies (Dong 2021). A large portion of the cut is used to invest in the website and the SEO advertisement so the companies can appear in the top searching result. Not only are the websites beautifully made with pictures, reviews, and animations, most of them also have 24/7 customer service to fulfill any special request and questions.

If the booster loses the game and causes the account to drop to a lower level, he will need to pay the amount of money as if he won the games (Dong 2021). Thus, it's possible for a booster to lose money on an unlucky day. In sum, the boosting industry is just as grinding and competitive as the video game industry it's within. If one wants to make a living on boosting, they need to play about 25 games a day at least (Dong 2021). In Hua P Dong's youtube interview with several boosters, an alleged top booster disclosed his schedule in which he would stay awake for 36 hours and play LoL straight. He admits himself that it's really unhealthy yet boosting is also a competitive industry where people have to play a lot for earning (Dong 2021). There are boosters living in low-income areas that are willing to play at a much lower rate than the market average since their living expenses are low. On average, the monthly income for normal boosters is only about $2000 (Eloboost24 2021).

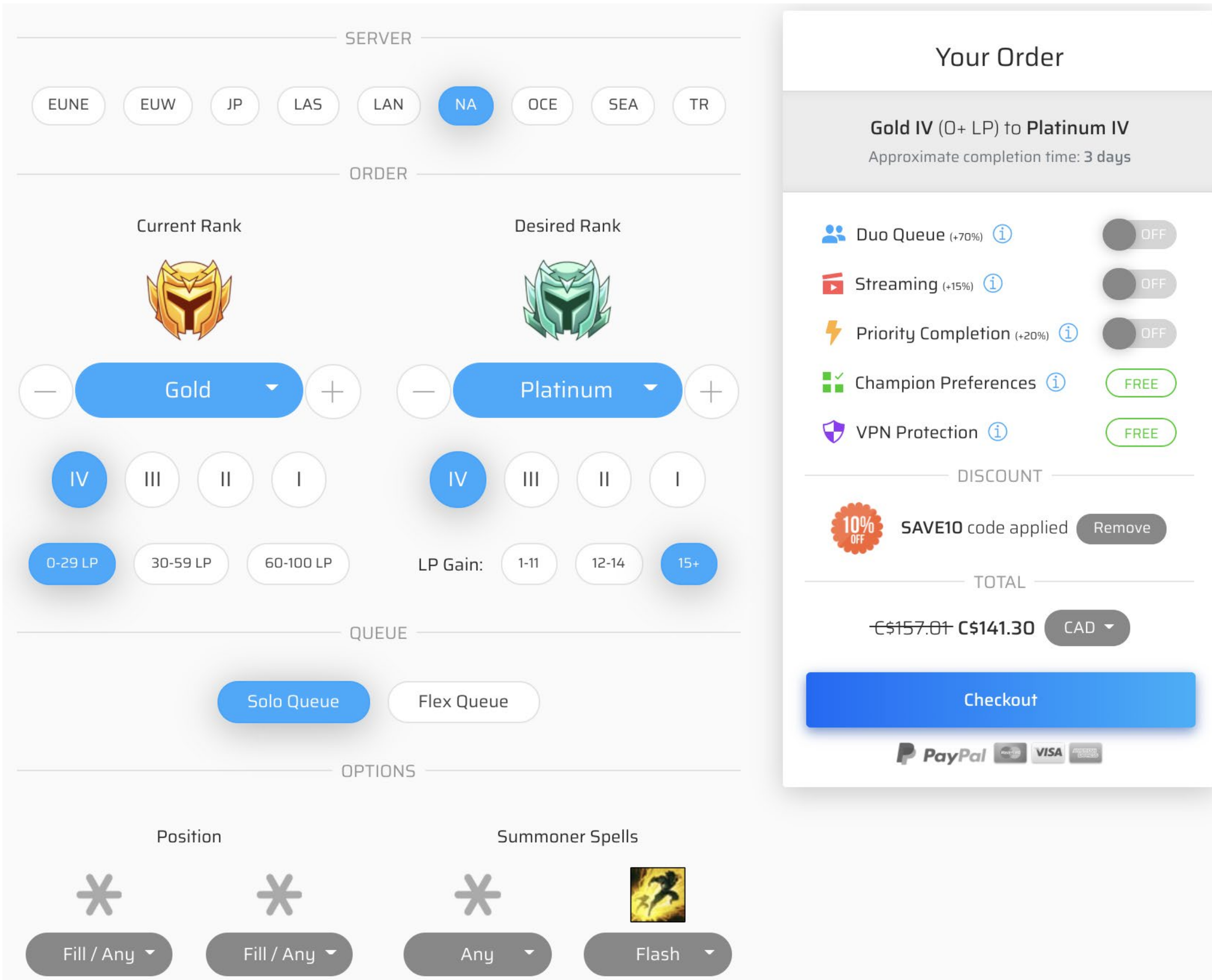


Figure 1: An order page on royalboosting.com. as of December 13, 2021

Corporation Response and Regulation

As a form of cheating, the impact of boosting on the fairness of the game and overall gaming experience is obvious. The Matchmaking Rating system is supposed to match the players with equal skills. However, boosting allows a higher-level player to play at a low rank account, which places the other players in a disadvantageous position and ruins their gaming experience. And when a game has too many boosting accounts, it tarnishes the reputation of the game. Although game companies have made serious attempts to curb boosting, it has become more and more difficult to detect boosting since it evolves over the season. Boosters will use the same champions as the players play and use VPN to hide themselves. As the counter-measurement, Riot Games develops Vanguard, a always-on anti-cheating software that is required for the game play (Riot Game Support 2021). According to the Riot's chief information security officer Chris HymesIf, Vanguard operates in the kernel driver, which means it runs even when user is not

playing the game. It secures the gameplay by checking any new software as it load on the computer and stop it if Vanguard finds security vulnerabilities in it (Conditt 2020).

If the boosting is detected, the penalty is account suspension that varies from days to years. The most infamous case would be the 1000-year ban Riots issued on Korean LoL player Apdo, along with a two years competitive ban after him being reported by his client for boosting (Shields 2018). Another Chinese professional LoL player Yu Xian has also been banned for 7 months after being found for financial gain on boosting (Lautenbach 2015). Besides Riots Game, Valve has taken action on boosting. In 2020, Valve banned over 40,000 DOTA 2 for players who were found abusing matchmaking (Prager 2020). However, despite those remarkable cases with professional players, bans on normal players are rare. Although there is no specific data on how many percent of players who boost get banned, some boosters said they've been boosting for years and have not seen a single ban on either their friends or clients . The effectiveness of game companies' regulation on boosting is questionable (Dong 2021).

With all the corporation regulation on combating Elo boosting, many players still consider cheating in video games merely a misconduct that is far from criminal responsibility. However, that is not the case anymore in Korea. In 2018, Korea's National Assembly passed a revision to the Game Industry Promotion Act, making the paid services to boost illegal when not authorized by the developer or publisher of the game. The act of boosting is considered an "act of disruption to a game's normal operations," according to The Korea Herald (Lanier 2018). This act is punishable by either a two-year jail sentence or a fine of up to 20 million won for the booster ($17,300). In addition, advertising boosting services is also a violation of the law (Bailey 2019). Yet up until now, there are no known cases for anyone being convicted under this act.

– G.H., Fall 2021

References

Branson, Cory. "Giving a Boost: How Top-Level Gamers Are Selling Their Skills Online." TheThunderbird.ca | News, analysis and commentary by UBC Journalism students, February 22, 2021. Accessed December 10, 2021. https://thethunderbird.ca/2021/02/16/giving-a-boost-how-top-level-gamers-are-selling-their-skills-online/

Bailey, Dustin. "You Can Now Spend Two Years in Jail for Account Boosting in South Korea." PCGamesN, June 25, 2019. https://www.pcgamesn.com/account-boosting-south-korea.

Conditt, Jess. "A Closer Look at Valorant's Always-on Anti-Cheat System." Engadget, May 15, 2020. https://www.engadget.com/valorant-vanguard-riot-games-security-interview-video-170025435.html.

Dong, Hua P. "League of Documentary - the Harsh Reality of ... - Youtube.com." youtube. June 14, 2021. Accessed December 10, 2021. https://www.youtube.com/watch?v=7_LbtCzckA0.

"History of Elo Boosting in League of Legends." Jealous Computers, January 19, 2021. Accessed December 10, 2021.https://jealouscomputers.com/elo-boosting-in-league-of-legends/.

"Elo Booster Salary, Earn by Playing? Is It Possible?: EB24." Elo Boost at Eloboost24.eu - Your number 1 Elo Boosting League of Legends Service. Accessed December 11, 2021. https://eloboost24.eu/blog/99

"Royal Lol Elo Boosting." LoL ELO Boost. Accessed December 10, 2021. https://boostroyal.com/lol-boosting

Riot Games "MMR / Elo Boosting – League of Legends Support." MMR/Elo Boosting, 2013. Accessed December 10, 2021. https://support-leagueoflegends.riotgames.com/hc/en-us/articles/201751834-MMR-Elo-Boosting/

"Teamfight Boosting Prices: Buy TFT Boost at the Cheapest Price." TeamFight Boosting Prices | Buy TFT Boost at the Cheapest Price. Accessed December 10, 2021. https://tft-boosting.com/prices.

Lanier, Liz. "South Korea Makes Commercial 'Boosting' Services Illegal in Video Games." Variety, December 10, 2018. https://variety.com/2018/gaming/news/korea-bans-boosting-services-1203085525/.

Lautenbach, Kyle. "Pro League of Legends Player Suspended for Elo Boosting in Exchange for Money." IGN Africa, July 23, 2015. https://za.ign.com/league-of-legends/92728/news/pro-league-of-legends-player-suspended-for-elo-boosting-in-exchange-for-money.

J. Tichon, S. Makaresz, Influencing young adult social and personal identity through video-game narratives, Asia Pac. J. Adv. Bus Soc. Stud. 5 P116–129, 2019, Accessed December 10, 2021.https://apiar.org.au/journal-paper/influencing-young-adult-social-and-personal-identity-through-video-game-narratives/

Prager, John. "Dota 2: Over 40,000 Were Accounts Banned by Valve for Matchmaking Abuse." ScreenRant, February 12, 2020. https://screenrant.com/dota-2-bans-why-matchmaking-smurf-booster-abuse/.

Shields, Duncan. "APDO - Korea's Infamous Solo-Queue Outlaw." Dot Esports, August 13, 2018. https://dotesports.com/league-of-legends/news/apdo-koreas-infamous-soloqueue-outlaw-5782.

"What Is Vanguard? – Valorant Support." Riots Games Support, 2021. https://support-valorant.riotgames.com/hc/en-us/articles/360046160933-What-is-Vanguard

Brazil, Esports

An Overview of Brazilian Esports

Brazilian's passion for sports is apparent in the growing national audience in the esports business, which is now one of the industries main markets (Newzoo, 2018). The rise of Brazilian Twitch viewers and the growing number of national video game developers have allowed this industry to grow (Samba Digital). With more game developers and a growth of interest in gaming, naturally, there is a rise of esports fans (Samba Digital). Due to this increased popularity, 29% of Brazilians who consume gaming content are watching esports which has allowed the country to become the Latin America leader in the market, in 2019 (Newzoo, 2018; Samba Digital). Brazil has the third most number of esports enthusiasts worldwide, with over 7.6 million fans watching games monthly, in 2018 (Newzoo, 2018). As a result, the esports audience in Brazil has almost doubled, from 2017 to 2021, summing up to a total audience of 27.9 million viewers. (Newzoo, 2018). Currently, the most watched games in Brazil are: League of Legends, Counter-Strike: Global Offensive (CS:GO), Clash Royale, Dota 2 and Overwatch, respectively (Newzoo, 2018). In regards to revenue, in most of Latin America, a significant portion of esports profit comes from brand investment, such as sponsorship and advertising (Newzoo, 2018). In Brazil, this profit keeps increasing over the years and the national esports market is expected to generate $55.6 million Brazilian reais (US $11.30 million) in 2021- double the amount produced in 2017 (Statista, 2021).

History of Esports in Brazil

The esports scene in Brazil began in the 2000s, with the rise of the professional CS:GO team, ARENA (Paiva et al., 2022). The team qualified to play in the CPL championship in 2003, but did not have the financial means to travel internationally. However, a businessman, called Paulo Velloso, invested in the team (something unusual at the time, which ended up opening doors to the national esports scene (Paiva et al., 2022). It was during this time and for the next decade that esports would begin to grow significantly in Brazil due to notable investments. As a result, the paiN Gaming organization was founded in 2010, and has now founded multiple teams in diverse games (Paiva et al., 2022). However, in the beginning, the organization was in only one game, and so decided to expand to others, establishing a League of Legends team a year later. Even though multiple esports teams already exist in Brazil, this industry is still undergoing significant development, as there is still no single game the country is very experienced in. (Paiva et al., 2022). For this reason, there is a lack of clear rules in regards to electronic sports in Brazil as the government does not yet recognize professional esports players. Even though legal hearings are taking place to pass on regulations to ensure that players and trainers are recognized, the same way as professional players in other sports, this remains uncertain (Cozer, 2019).

The Role of Brazilian Sports Clubs in Esports

The esports industry has become extremely popular amongst the Brazilian population due to the nation's passion for the sporting world. The increased popularity, combined with the fact that this is a market with great visibility, motivated traditional sports companies and brands to invest in esports (Arraché, 2021). As a result, the esports audience increased due to fans' loyalty to each

team (Newzoo, 2018). Brazil's biggest soccer clubs have ventured into esports by creating their own teams to compete in different championships. Flamengo, Brazil's most popular football team, has introduced its official team in the League of Legends (Newzoo, 2018). Similarly, other teams such as Santos, created the Santos HotForex e-Sports, also part of the CBLoL (League of Legends), and Corinthians have their own team in Fire Squad (Candalez, 2020). These are only a few of the major soccer teams that have invested in the national esports industry. Additionally, Brazilian major soccer clubs, such as Flamengo, sponsor large events such as the Brazilian League of Legends (CBLoL) (Samba Digital). With the support and sponsorship of major sports clubs, the esports market has a great chance of expanding and reaching larger audiences.

However, there is still a large number of major Brazilian soccer teams that have not entered the esports world. This can be due to issues involving conservativeness, that might disregard online gaming as a genuine sport. Likewise, some clubs might suffer with poor management skills or even the inefficiency to look for consultation on how to start venturing into the esports business (Candalez, 2020).

Inequality and Inaccessibility in Esports for Minorities

The video game and esports industry have been able to develop in Brazil due to the accelerated increase in internet access that occurred during the last decade (Caetano, 2022). However, inequality still remains an issue in the country and is reflected in esports structure and audience. Much of the data gathered about the stereotypical gamer in Brazil is based on one city, São Paulo, which portrays an archetypal male player, with high socioeconomic status and access to advanced technology (Cozer, 2019). This does not reflect the current general esports business model, as it does not operate the same way in the peripheral regions and favelas of Brazil (Caetano, 2022).

Brazil is a very unequal country, with over 25% of the population considered poor (Garcia, 2021). Therefore, access to the primary equipment to be able to play esports is not always possible, especially for individuals who live in the favelas (Garcia, 2021). Also, in these highly competitive games, having reliable equipment and high-speed internet is essential, as a single second can make a huge difference in the game play. Yet, this is not possible for most of the individuals who live in the favelas- making the possibility of succeeding in these games almost impossible (Garcia, 2021). As a result the mobile game Free Fire, has become the most popular game, being played by 70.9% of all Brazilian gamers as it only requires a simple smartphone: an easily accessible device (Miranda & Queiroga, 2021).

Even though games such as League of Legends and CS:GO are popular in Brazil, they are only accessible and affordable for a specific demographic, as mentioned. So, as anticipated, only 18.3% of Brazilian gamers play utilizing PC devices, and therefore, those living in the favelas cannot fully experience the gaming world (Miranda & Queiroga, 2021).

Developments in Brazilian Esports

Esports in Brazil has demonstrated an exponential growth throughout the last years, especially since 2014 with the introduction of new teams, platforms for broadcasting and companies.

Firstly, the pandemic was key in increasing people's interest in these video games (Samba Digital). As physical sports were suspended, fans were forced to seek an alternate method to comfort their love for the game and competition (Samba Digital). Additionally, in 2021, Globo Ventures, the investment group part of Brazil's largest media conglomerate, Rede Globo, established the gaming startup: Player 1 Gaming Group. The company is focused on creating an esports community, and will be in charge of promoting the esports tournaments, such as Brazilian Counter-Strike Championship. The platform wants to build initiatives to help the amateur player develop skills, and potentially become future professional gamers (Player 1 Gaming Group, 2022).

-S. L., Spring 2022

References

Arraché, Eric. "O incrível crescimento do mercado dos E-Sports no Brasil e no mundo." Terra. September 16, 2021. Accessed May 6, 2022. https://criticalhits.com.br/games/o-incrivel-crescimento-do-mercado-dos-e-sports-no-brasil-e-no-mundo/ .

Caetano, Mayara. "A Region of Contenders: Overwatch in Brazil." *Modes of Esports Engagement in Overwatch* (2022): 113-133. https://doi.org/10.1007/978-3-030-82767-0_7 .

Candalez, Greg. "These are the Greatest Soccer Teams on Esports in Brazil". FD Comunicação. May 19, 2020. Accessed May 6, 2022. https://www.fdcomunicacao.com.br/en/these-are-the-greatest-soccer-teams-on-esports-in-brazil/ .

Cozer, Carolina. "O futuro Do Segmento De Esports No Brasil e No Mundo". Consumidor Moderno. November 22, 2019. Accessed May 6, 2022. https://www.consumidormoderno.com.br/2019/11/22/futuro-segmento-esports-brasil-mundo/ .

"Esports in Brazil: A Sleeping Giant." Samba Digital. Accessed May 5, 2022. https://sambadigital.com/esports-in-brazil/ .

"Esports in Brazil: Key Facts, Figures, and Faces." Newzoo & Esports Bar. 2018. Accessed May 5, 2022. https://resources.newzoo.com/hubfs/Reports/Esports_Bar_Newzoo_Esports_in%20Brazil.pdf .

Garcia, Raphael Tsavkko. "In Brazil's Favelas, Esports Is an Unlikely Source of Hope". Wired. March 24, 2021. Accessed May 6, 2022. https://www.wired.com/story/brazilian-favelas-esports/ .

Gough, Christina. "eSports penetration rate in Brazil in 2019," chart, January 13, 2021. *Statista*. https://www.statista.com/statistics/1076804/esports-penetration-brazil/ .

Miranda, Beatriz & Queiroga, Luiz. "An Esports Revolution Is Sweeping Through Brazil's Favelas". Rest Of World. 28 October, 2021. Accessed May 6, 2022. https://restofworld.org/2021/esports-brazil-favelas/#:~:text=It%20is%20no%20coincidence%20that,70.9%25%20of%20all%20Brazilian%20gamers .

Paiva, Leonardo Paschoalini, Evangelista, Lucas De Moura Alves, & Folonim Marcela Luísa. "Esports Athletes in Brazil: History and Law". *Gaming Law Review* 26, no. 2 (2022): https://doi.org/10.1089/glr2.2021.0014 .

"Quem Somos." Player 1 Gaming Group. Accessed May 6, 2022. https://www.p1gg.com.br/sobre .

Canada: Montreal, Regional Video Game Industry

Overview

The Montreal video game industry is one of the most notable illustrations of creative-sector development. Montreal is the largest city in the province of Quebec and the second largest city in Canada; it acts as the province's core cultural and economic engine, with a strong foothold and presence in the technology and digital media sectors, specifically in game development. In just about twenty five years, Montreal has set foot into becoming the international leader of game development, home to over 330 studios and nearly 15,000 workers in game-related professions (La Guilde du jeu vidéo du Québec n.d.). The region's prominence is significantly driven by the government's generous multimedia tax program (RD Partners n.d.), combined with a sizable bilingual talent pool, and the establishment of these global players like Ubisoft, EA, Warner Bros. Games, Eidos, Gameloft, Behaviour Interactive, as well as numerous indie teams, have contributed to the region's growth.

Montreal's Emergence as a Video Game Production Hub

To trace history, Quebec's commercial game industry started to take shape in the 1990s, when early studios like Behavior Interactive introduced and cemented a homegrown development ecosystem (Behaviour Interactive n.d.). The year 1997, Quebec rolled out the Tax Credit for the Production of Multimedia Titles (Crédit d'impôt pour la production de titres multimédia, often abbreviated CTMM), which is a refundable program that reimburse a percentage of qualifying labor expenses that is tied to the production of digital media projects (RD Partners n.d.). Depending on the type of projects and language, the credit program enables companies to reclaim up to 37.5 percent back on approved labor costs and related expenditures Alongside, competitive low operating costs and the strong access to both North America and Europe markets, this made Montreal highly attractive to become one of the best location for major publishers to build out substantial development operations internationally in the city of Montreal (Montréal International 2021).

In the late 1990s, the expansion of Ubisoft in Montreal is often credited with generating the momentum that propelled the industry into where it is today, encouraging other multinational firms to invest and accelerate the growth of local expertise, subsequently contributing to networks such as La Guilde du jeu vidéo du Québec that strengthened a collaborative and community-oriented development culture in Montreal (La Guilde du jeu vidéo du Québec n.d.). The growth of AAA studios, including Ubisoft Montréal, WB Games Montréal, Eidos-Montréal, and Gameloft Montréal, was reinforced by the rise of local supporting systems such as middleware providers, QA teams, localization firms, and audio studio, and co-working environments (Montréal International 2021) for game production. In the 2010s, decreasing tool costs and widely accessible digital production made it far easier for independent developers to form and scale quickly, exemplified by studios like Red Barrels, Compulsion Games, and Panache Digital Game and their move toward self-published titles.

Industry Structure, Key Players, and Economic Impact

At present, Quebec's video game sector consists of upwards 330 studios and approximately 15,000 direct jobs, the majority of which is located in the city of Montreal (La Guilde du jeu vidéo du Québec n.d.). According to La Guilde du jeu vidéo du Québec – a non-profit cooperative and the leading organization for Quebec's video game industry, representing over 330 members — the province's game industry generated approximately CAD $1.4 billion in annual revenues, which translates into around 57 percent of Quebec's digital-creativity sector, with exports accounting for nearly 90 percent of total revenue (La Guilde du jeu vidéo du Québec n.d.). This heavy export-driven revenue base situates Montreal to operate as a central node in global production networks, delivering titles and and services to worldwide publishers and platforms rather than only serving the Canadian market demand (Montréal International 2021).

Montreal's game industry spans everything from large AAA studios, mid-tier developers, and smaller scale indie teams, making the province a hub for a highly diverse sector. Notable, Ubisoft Montreal alone has created more than 3,600 jobs and poured billions of dollars into the province,and early player Behavior Interactive has developed into one of the country's leading independent game studios. At the same time, indie developers have benefitted from incubators like GamePlay Space and events such as MEGA+MIG (Aka. Montréal Expo Gaming Arcade / Montreal International Game Summit), that open global exposure to networks of inventors, partners, audiences , and other publishers. In addition, the city is also initiatory in experimenting with newer areas like virtual reality and augmented reality, game power by AI, and gamification in cross-sector such as health and education (Montréal International 2021).

Besides a substantial amount of studios revenues, the video game industry indirectly boosts the regional economy via skilled employment, needs for specialized services, and significant foreign investment. According to Montreal International, Greater Montreal has "a cost advantage of approximately 28% over 20 major North American metropolitan areas" due to generous tax credits for Research and Development (R&D) and relatively low tech talent wages, making business operations far more affordable in Montreal. With Montreal already serving as the financial center of Quebec, these competitive advantages — lower operating costs, strong incentives, and steady foreign investment — help explain why video games have become the flagship part of the province's technological and cultural profile.

Talent, Education, and Policy Environment

The prominence of Montreal's video game industry is also strongly tied to its domestic talent pool. Regional development agencies estimate that Greater Montreal employs approximately 15,000 workers with technical expertise in video gaming. This talent pool pipeline begins in the education system, with more than 3,400 students in game, animation, and VFX programs, over 18,000 university students in IT-related degrees, and about 2,200 enrolled in arts programs (Montréal International 2021). Major Universities including McGill University, Université de Montréal, Université du Québec à Montréal (UQAM), and Concordia University offer degrees in computer science, software engineering, digital arts, and game design, while specialized institutions like NAD-UQAC focus on 3D animation and interactive media. This illustrates the depth and diversity of Montreal's human capital infrastructure on how schools are preparing and supplying these competencies required for a competitive gaming industry.

In addition to Montreal's talent pool, public policy plays a major role in industry's growth as well. Alongside with the CTMM tax credit program, other provincial and federal programs such as those run by Investissement Québec and the Canada Media Fund provide R&D and cultural support regarding video game development (Canada Media Fund n.d.). Just as importantly, immigration pathways like the Global Talent Stream and Quebec's simplified work-permit system enable studios to recruit highly skilled workers from abroad (Canada. Employment and Social Development Canada n.d.).

In response to all these lucrative incentives and global demand for video games, the industry has expanded steadily over the past few decades. However, local observers point out some ongoing challenges, such as the oligopoly market that is run by small numbers of multinational publishers, waves of hiring and layoffs that follow project season, plus recurring concerns over intense periods of "crunch" and working conditions (Syndiquer.org n.d.). Even with these challenges, the combination of strong public support, a dense local ecosystem, and a reliable pipeline of skilled workers suggests that the sector will remain a key pillar of Montreal's economy for years to come.

-J.W., Fall 2025

References

Canada Media Fund (CMF). n.d. Canada Media Fund. Accessed December 2025. https://cmf-fmc.ca/.

Canada. Employment and Social Development Canada. "Global Talent Stream Requirements." Accessed December 2025.https://www.canada.ca/en/employment-social-development/services/foreign-workers/global-talent/requirements.html.

"Quebec: Simplified Process for Hiring Foreign Workers." Accessed December 2025. https://www.canada.ca/en/employment-social-development/services/foreign-workers/quebec/simplified-process.htm.

La Guilde du jeu vidéo du Québec. n.d. "Our Industry." Accessed December 2025. https://www.laguilde.quebec/en/our-industry/.

Montréal International. 2021. Industry Profile: Video Game. Accessed December 2025. https://www.montrealinternational.com/app/uploads/2019/02/industry_profile_video_game_2021-1.pdf.

"Geographic Zones." Accessed December 2025. https://www.montrealinternational.com/en/invest/geographic-zones/.

"Tax and Financial Incentives." Accessed December 2025. https://www.montrealinternational.com/en/invest/step-by-step/tax-and-financial-incentives/.

RD Partners. n.d. "Intro to the Tax Credit for the Production of Multimedia Titles." Accessed December 2024. https://www.rdpartners.com/blog/intro-to-the-tax-credit-for-the-production-of-multimedia-titles.

MEGA+MIGS. n.d. "Quebec: A Global Hub of Video Game Production." Accessed December 2025. https://migs.biz/en/quebec-a-global-hub-of-video-game-production/.

Behaviour Interactive. n.d. "New Study on Quebec's Video Game Industry." Accessed December 2024. https://media.bhvr.com/new-study-on-quebec-s-video-game-industry.

Wikipedia. 2024. “Montreal.” Accessed December 2025.https://en.wikipedia.org/wiki/Montreal.

“Economy of Montreal.” Accessed December 2025.https://en.wikipedia.org/wiki/Economy_of_Montreal.

Syndiquer.org. n.d. “Video Games – Union Resources.” Accessed December 2025. https://sesyndiquer.org/jeux-video/en/.

Capcom

Overview

Capcom Co., Ltd. is a Japanese video game developer and publisher based in Osaka. The company was founded in 1979, originally as a manufacturer and distributor of game machines. The name Capcom is an abbreviation of "capsule computer" based on two concepts: "a container packed to the brim with fun" and "a desire to create securely packaged games to decrease the rapid expansion of pirated materials." (Capcom 2021) Since its establishment, Capcom has created commercially successful game franchises including *Street Fighters*, *Resident Evil*, *Monster Hunter*, and *Devil May Cry*.

Capcom Co Ltd is a publicly-traded company with a market cap of $5.71 billion as of May 2022 (MarketWatch 2022). The company has 3,152 employees in 2021 and has international offices in locations including San Francisco, London, Hong Kong, Taiwan, and Singapore (Capcom 2021).

Origin and Early History

The predecessor of Capcom, I.R.M Corporation, was "founded with the objective of developing and selling electric applied game machines" on May 30, 1979 (Capcom 2021). In May 1981, I.R.M. established a subsidiary named Japan Capsule Computer. Two years later, Capcom Co., Ltd. was established in Hirano, Osaka in June 1983 for the purpose of selling software, which marked the formal establishment of Capcom as a game developer and publisher.

In July 1983, Capcom released its first originally developed coin-op *Little League*. In May 1984, the company moved on to release its first arcade video game named *Vulgus*. After the success with several arcade games, Capcom entered the home console game market with its first home video game *1942* for Nintendo Entertainment System in December 1985. The arcade video game *Street Fighter* was released in 1987. In the same year, the first game of *Mega Man* was released on NES. In 1991, *Street Fighter II* was released as an arcade video game, and "triggered the Street Fighter boom." (Capcom 2021) Its release on Super NES in 1992 also became a mega-hit.

Capcom Five and its Aftermath

The success of Capcom's titles on the NES and Super NES system fostered a close partnership between Capcom and Nintendo. However, with the emergence of rivaling home consoles such as Sega and Sony, Nintendo's control over its relationship with third-party developers has weakened (Plunkett 2013). In 1996, for example, Capcom released the first game of the new game series *Resident Evil* on PlayStation (Capcom 2021).

When Nintendo attempted to reclaim market share and relationship with third-party developers on its console GameCube, Capcom showed support by announcing five new titles that were claimed to be exclusive to GameCube in 2002, including *P.N.03*, *Killer7*, *Dead Phoenix*, *Resident Evil 4*, and *Viewtiful Joe*. The claim of exclusivity, however, was later announced by Capcom to be a miscommunication, and only *Resident Evil 4* would be a guaranteed exclusive to GameCube (IGN 2003). Among the five titles, *Dead Phoenix* was canceled and only P.N.03 remained a GameCube

exclusive. The sale of *Resident Evil 4*, a game gaining wide success, on GameCube was undercut by its subsequent release on PlayStation 2 in 2005 (Plunkett 2013).

The failure of the Capcom Five was demonstrative of the change in the attitude of third-party developers towards Nintendo in general (Plunkett 2013), and the shift of Capcom's strategy towards multi-platform release (Capcom 2004). The unsuccessful outcome of the project also marked the start of a series of departures of Capcom's core creators, including *Street Fighter II* producer Yoshiki Okamoto in 2003; Shinji Mikami (*Resident Evil*), Atsushi Inaba (*Viewtiful Joe*, *Okami*) and Hideki Kamiya (*Devil May Cry*) in 2007; and Keiji Inafune (*Mega Man*) in 2010 (Kohler 2010). The producers that left Capcom would go on to found notable video game companies such as PlatinumGames (Stanton 2016).

Franchises Development

The lesson from Capcom Five also encouraged Capcom to shift emphasis from creating new intellectual properties to developing existing game franchises (Capcom 2004). Until this day, Capcom has created 19 video game franchises that are over a million in sales (Capcom 2022). The series developed by Capcom prevail in a number of different genres and target different markets. *Resident Evil*, the best-selling series of the company with more than 100 million total copies sold, is credited for defining the survival horror genre. Both the *Resident Evil* series and *Devil May Cry*, an action-adventure game series with a survival-horror origin, are set in modern Western backgrounds, and designed with the global market in mind. Meanwhile, other Capcom series such as *Monster Hunter*, *Ace Attorney*, and *Sengoku Basara* with more traditional Japanese settings have achieved popularity within the Japanese audiences (Capcom 2015).

Capcom also relies on other media forms such as film adaptations to fully take advantage of the potential of its major IPs. In December 1994, the Street Fighter series was adapted into a Hollywood film of the same name. In March 2002, the first film of the Hollywood adaptation of *Resident Evil* premiered, which recorded sales of 102 million dollars worldwide (Capcom). The film series continues to become the highest-grossing film series based on video games with more than $1.3 billion in box office and home video sales (Mendelson 2017). The Hollywood adaptations have been an important way for the company to "reach a broad enough audience to have sales of close to a million units at launch" for the games (Gaudiosi 2011).

Capcom Today

Currently, Capcom operates its business under four segments, digital content, arcade operations, amusement equipment (pachinko & pachislo), and other businesses. The digital content segment, which includes console, PC and mobile content, consists of 79% of Capcom's net sales. The company continues to operate around the Single Content Multiple Usage approach, developing multimedia content to the fullest extent around existing popular IPs (Capcom 2021).

The existing console and PC game series remain the main force that has driven the growth of the company in recent years. *Monster Hunter: World* was released in 2018 to achieve massive success by selling a cumulative total of more than 20 million units by October 2021, and becoming the best-selling game in the company's history. Moreover, it expands the player base of the series significantly in the international market, with sales outside of Japan accounting for an

overwhelming 71% of total sales (Frontline Gaming Japan 2018). In 2019, Capcom released *Resident Evil 2*, a remake of the original game released in 1998. The remake received critical acclaim and success in sales, selling 9.3 million copies by December 2021, surpassing the sales of the original game (Romano 2022).

Capcom continues to capitalize on the renewed success of the existing series, releasing titles including the remake of *Resident Evil 3* in 2020, and *Monster Hunter: Rise* for Nintendo Switch and *Resident Evil Village* in 2021. From 2018 to 2021, Capcom has reported new records for its profit four years in a row (Batchelor 2021). For the nine months ended December 31, 2021, consolidated net sales were 88,163 million yen (up 35.9% from the same term in the previous fiscal year). In terms of profitability, operating income was 35,096 million yen, which is up 43.9% from the previous fiscal year (Capcom 2021).

Meanwhile, Capcom focuses on expanding its business in rapidly growing markets such as mobile gaming and esports. Capcom has published a number of games on the mobile platform, most of which are built around existing IPs, such as *Rockman X DiVE* and *Monster Hunter Riders*. However, Capcom has described the mobile market as a weak point of the company's strategy, which brought only 5.7% of the net sales of the digital contents segment in 2021, citing its "insufficient expertise in ongoing game operations." (Capcom) The company has also been holding the Capcom Pro Tour, the official world championship tournament for the Street Fighter series, since 2013, and has set up an eSports department in 2018. While Capcom promises to put in efforts and investment in the development of mobile gaming and eSports, it continues to rely on its flagship IPs and the console and PC game market as the major driving force of growth, especially on further expansion in the international market (Capcom 2021).

-S.D., Spring 2022

References

Batchelor, James. "Capcom Reports Fourth Consecutive Year of Record High Profits." GamesIndustry.biz. GamesIndustry.biz, May 10, 2021. https://www.gamesindustry.biz/articles/2021-05-10-capcom-reports-fourth-consecutive-year-of-record-high-profits.

"Capcom Annual Report 2004." Capcom, March 31, 2004. https://www.capcom.co.jp/ir/english/data/pdf/2004annual/Annual2004e.pdf

"Capcom Integrated Report 2015." Capcom. Accessed May 8, 2022. https://www.capcom.co.jp/ir/english/data/annual_2014.html.

"CCOEF Stock Price: Capcom Co. Ltd.. Stock Quote (U.S.: OTC)." MarketWatch, May 5, 2022. https://www.marketwatch.com/investing/stock/ccoef.

"Corporate Information: Philosophy." Capcom, November 29, 2021. https://www.capcom.co.jp/ir/english/company/philosophy.html.

"Corporate Information: History." Capcom, December 12, 2021. https://www.capcom.co.jp/ir/english/company/history.html.

"CGD 03: Capcom Five Not GCN Exclusive." IGN. IGN, January 16, 2003. https://www.ign.com/articles/2003/01/16/cgd-03-capcom-five-not-gcn-exclusive.

Gaudiosi, John. “Capcom Seeks More Playtime in Hollywood.” The Hollywood Reporter. The Hollywood Reporter, February 19, 2011. https://www.hollywoodreporter.com/business/business-news/capcom-seeks-more-playtime-hollywood-147973/.

Kohler, Chris. “Mega Man Creator's Departure Completes Capcom Talent Exodus.” Wired. Conde Nast, October 29, 2010. https://www.wired.com/2010/10/keiji-inafune-quits/.

Mendelson, Scott. “How 'Resident Evil' Became the Most Successful Video Game-Based Franchise Ever.” Forbes. Forbes Magazine, January 23, 2017. https://www.forbes.com/sites/scottmendelson/2017/01/23/why-resident-evil-became-the-most-successful-video-game-based-franchise-ever/?sh=f78065a3dec2.

“Monster Hunter: World - Global Game Business Summit Presentation (TGS2018).” Frontline Gaming Japan, May 19, 2021. https://www.frontlinejp.net/2018/09/21/monster-hunter-world-global-game-business-summit-presentation/.

“Online Integrated Report 2021.” Capcom, April 13, 2022. https://www.capcom.co.jp/ir/english/data/oar/2021.html.

“Overview of Strategies and Plans Fiscal Year Ending March 31, 2022.” Capcom. Accessed May 9, 2022. https://www.capcom.co.jp/ir/english/data/pdf/explanation/2020/full/explanation_2020_full_01.pdf.

Plunkett, Luke. “Remembering Capcom's Great Nintendo Promise / Betrayal.” Kotaku. Kotaku, June 20, 2013. https://kotaku.com/remembering-capcoms-great-nintendo-promise-betrayal-5806800.

“Product Data: Game Series Sales.” Capcom, February 1, 2022. https://www.capcom.co.jp/ir/english/business/salesdata.html.

Romano, Sal. “Capcom Sales Update: Resident Evil Village at 5.7 Million, Resident Evil 2 Remake at 9.3 Million, More.” Gematsu, February 15, 2022. https://www.gematsu.com/2022/02/capcom-sales-update-resident-evil-village-at-5-7-million-resident-evil-2-remake-at-9-3-million-more.

Stanton, Rich. “A Brief History of One of Gaming's Greatest Studios.” Eurogamer. Eurogamer, February 7, 2016. https://www.eurogamer.net/articles/2016-02-07-a-brief-history-of-one-of-gamings-greatest-studios.

CD PROJEKT

Overview

CD PROJEKT is a holding company focused on digital entertainment. Under CD PROJEKT exists CD PROJEKT RED and GOG.com. CD PROJEKT RED develops games, and also has its own publishing and marketing division that globally promotes its releases. (CD PROJEKT 2016). GOG.com, short for Good O'l Games, is a worldwide online distribution platform with a focus on DRM free content. The company operates out of Poland, where it is part of WIG20, a list of the 20 largest companies on the Warsaw Stock Exchange (CD PROJEKT 2018). In 2017, CD PROJEKT made 463 million PLN (approximately 122 million USD) (CD PROJEKT 2018). These profits are consolidated from sales on GOG.com and from CD PROJEKT REDs flagship IP, The Witcher series. Since the company's founder Marcin Iwiński began selling pirated game copies in highs school, CD PROJEKT has benefited from the large growth of the video game industry as a whole. In 2017 video game software sales reached $100 billion, and it is forecasted that by 2022 this will reach $134 billion.

Business Strategy

Formed in 1994 by Marcin Iwiński and Michal Kiciński, CD PROJEKT is named from the two friends selling pirated CDs at computer markets while growing up in Poland. Once they legitimized the business, CD PROJEKT had its first success by localizing the RPG Baldur's Gate. This was the beginning of CD PROJEKT's unique approach to dealing with piracy in the video game industry. The game was a BioWare developed RPG and published by Interplay Entertainment in 1998. Most schools at the time were not teaching english, so CD PROJEKT translated the game to Russian and hired polish actors for voice work. They sold the game for £30, even though the pirates were selling the game for £15. However, the added value of the localized version was enough to sell 18,000 copies on the first day. Today, this business has become GOG.com, which has a no DRM policy, and instead relies on the value and support provided alongside the games (Purchese 2015).

Since acquiring the rights to The Witcher and establishing CD PROJEKT RED, the company uses its revenue from GOG.com (which is internally called CD PROJEKT BLUE) to sustain the development of its AAA titles. This allows them to make their own decisions about how they develop their games, independent from any external publisher (Purchese 2015). They believe the success of CD PROJEKT RED is largely due to being able to create games that players actually want, and give them as much content as possible instead of charging extra for it (CD PROJEKT 2016).

In August 2018, CD PROJEKT took a majority stake in mobile game studio Spokko, which is now part of the CD PROJEKT group. It is yet to be announced what Spokko is working on, but CD PROJEKT has now also followed the money into the area of mobile gaming. Consistent with the company's philosophy, they will provide Spokko with access to their IP and give them the support of CD PROJEKT RED, but Spokko will remain largely independent (Batchelor 2018).

In addition, the company has taken a foray into esports with Gwent, which is a card game created for and playable in The Witcher games. Despite the expense, including an $850 million prize, the company says they are not considering Gwent to be a source of revenue. CD PROJEKT is focusing on raising awareness for Gwent, and finding the best Gwent players that exist (Batchelor 2017).

AAA Development

CD PROJEKT RED's flagship series, The Witcher, is based on a book series written by Andrzej Sapkowski, about a monster hunter named Geralt trying to find his daughter in a magical medieval world. The first game came out in 2007. 4 years later in 2011, they released The Witcher 2: Assassins of Kings. In 2015, they released The Witcher 3: Wild Hunt. It is the most successful game in the series, with 6 million sales in the first 6 weeks (Makuch 2015). In 2017, about a year and a half after release, the game made over 1 billion PLN in revenue, approximately 266 million US dollars. (Barrett 2017). The series has sold over 25 million copies in total.

With The Witcher 2, CD PROJEKT RED created a custom game engine called REDengine. This is a proprietary tool that they continually update and refine for each game, allowing them an unlimited amount of control. It is optimized for open world RPGs, and it works across PC, Xbox, and Playstation platforms.

The Witcher games are dark and morally complicated, designed to make the player feel and think about the choices they make in the game. This dark, mature theme has proven to be quite effective. The next big game being developed by CD PROJEKT RED is called Cyberpunk 2077. This game will be set in a far away future (2077, to be precise) that is defined by cybernetic enhancements, set in a fictional place called Night City. The game promises the same dark tone as the Witcher series, however Cyberpunk 2077 does not currently have a release date, and the first teaser trailer released in 2013 says “when it’s ready” at the end. Because of their unique funding model through GOG.com, CD PROJEKT is able to go through the development process at their own pace.

Since humble beginnings in its early days and failed attempts at the first Witcher game and a cancelled console port, CD PROJEKT has grown into one of the most respected and most successful companies in the video game industry. By combining the stages of the industry under one umbrella with a single interest, CD PROJEKT has conquered many of the pitfalls that have traditionally hindered developers and publishers alike.

-J.L., Fall 2018

References

Barrett, Ben. 2017. “CD Projekt Rich: Witcher 3 Revenues Total $250 Million, Trilogy Sells 25 Million.” PCGamesN. March 31. https://www.pcgamesn.com/the-witcher-3-wild-hunt/the-witcher-sales-figures-profit.

Batchelor, James. 2017. “From Taverns to Tournaments: The Rise of Gwent as an Esport.” GamesIndustry.biz. GamesIndustry.biz. October 19. https://www.gamesindustry.biz/articles/2017-10-19-from-taverns-to-tournaments-the-rise-of-gwent-as-an-esport.

Batchelor, James. 2018. “CD Projekt Enters Mobile Games Development with Spokko.” GamesIndustry.biz. GamesIndustry.biz. August 21. https://www.gamesindustry.biz/articles/2018-08-21-cd-projekt-enters-mobile-games-development-with-spokko.

“Capital Group.” 2018. CD PROJEKT. CD PROJECT. Accessed December 12. https://www.cdprojekt.com/en/capital-group/.

“CD PROJEKT Joins the WIG20 Blue-Chip Index.” 2018. CD PROJEKT. CD PROJEKT. March 1. https://www.cdprojekt.com/en/media/news/cd-projekt-joins-wig20-index/.

Makuch, Eddie. 2015. “Witcher 3 Sells 6 Million Copies.” GameSpot. Gamespot. August 26. https://www.gamespot.com/articles/witcher-3-sells-6-million-copies/1100-6430070/.

Purchese, Robert. 2015. “Seeing Red: The Story of CD Projekt.” Eurogamer.net. Eurogamer.net. May 17. https://www.eurogamer.net/articles/2013-11-06-seeing-red-the-story-of-cd-projekt.

“Strategy.” 2016. CD PROJEKT. CD PROJEKT. March. https://www.cdprojekt.com/en/capital-group/strategy/.

China, Game Regulation

Overview

Regulation is a persistent, crucial aspect of the Chinese game industry. Due to the concerns of addiction, anti-socialism pathology, and western cultural imperialism, the Chinese authority has exerted multiple significant, episodic regulations on video games and their by-product (Zhang 2013, 1). From the first console ban in 2000 to the teenage gaming restriction in 2021; from the heavily auditing process to ambiguous disciplines of approvable contents; from the age restriction of esports players to the limitation of live streaming, these strict regulations significantly influence the industry, including its developers, publishers, consumers (gamers, e-sport audiences), and relevant workers (Camilo 2021). Meanwhile, multiple noteworthy issues, including intimidating game production, diminishing industry revenue, and declining esports potentiality are raised.

Reasons for the Regulation

Video game critics in China persistently regard games as having negative effects, including exposure to pornographic and violent content, excessive hours of play, uncontrolled consumerism, and erosion of western culture to young minds – all contradict and threaten nationalist and socialist goals (Zhang 2013, 9). Among the aforementioned influences, game addiction is the top concern of the Chinese government. Currently, China has more than 720 million gamers while 110 million of them are adolescents (McGregor 2021). A recent survey exhibit that Chinese gamers play more hours of video games per week than any other country (McGregor 2021). China's state-run newswire Xinhua blasts video games as "spiritual opium" due to the situation. Hence, these critics summarize that the game industry and its consumers should be constantly guided, controlled, monitored, and regulated (Zhang 2013, 9).

First Regulation in China Game Industry

In 2000, the arcade business was skyrocketing in China. However, most games came from piracy. A large portion of these games was illegally or poorly operated and controlled (That's Shanghai 2017). Accordingly, seven government ministries in China established a plan against these games that might "seriously harm the healthy growth of youngsters"(Lai 2013). A bill came out that stated that "with the exception of processing trade, the import of electronic game equipment plus its parts and accessories through other forms of trade is strictly limited," heralding a 14-year ban on consoles in China (Lai 2013).

Current Regulations in the game industry in China

Game Publishing

In 2019, the State Administration of Press and Publication (SAPP) posted new rules, announcing that games submitted after August 2018 were required to resubmit under the new approval process. In addition, the SAPP has started to control the number of video games that receive a license each year. Certain types of games, including overly obscene or immoral games, and

imperial harem games, no longer receive approval (Niko Partners 2020). On the publisher side, the new rule required game publishers to self-regulate their content with an editorial team that would examine the content of games before publishing for approval. Ultimately, foreign titles and games that do not promote traditional Chinese culture and history would confront a more complicated publishing approval after the establishment of the new rule (Niko Partners 2020).

Sensitive Contents
In April 2019, blood and gore were officially banned in video games in China. A month later, The State Administration of Press, Publication, Radio, and Television's new regulations also prohibited the word "kill" in any form in the game (eg. Penta kill turned to five defeat streak in Honor of Kings) (Richman 2019). In September 2021, 213 video gaming companies signed a self-regulation pact, which commits them to eschew or obliterate any content that is discouraged by Chinese authorities. The pact stated that politically sensitive, historically nihilistic (historical figures must not be refashioned), and morally inappropriate (gay romance and effeminate males) themes are violating contents (Brooke 2021).

Teen Gaming Time
On August 30, 2021, new rules, released by the National Press and Publication Administration (NPPA), further tightened restrictions on teenage gaming times. The old restriction from 2019 limited players under 18 to have no more than 90 minutes of gaming on weekdays and three hours a day on weekends (Buckley 2021). The new restriction curbed adolescents a one-hour-only gaming time on Friday and weekends, at a fixed time interval of 8-9 PM (NPPA 2021). The new guidelines also declared that game companies must ensure real name authentications before offering game services to under-18s (Brooke 2021).

Esports
On August 30, 2021, the NPPA also added a minimum 18-years-old age requirement for e-sports players. The restriction impacted China's esports industry immediately. TJ sports, the League of Legends esports operator in China, announced all its esports competitions would comply with the regulation. 17-year-old player Lin "Creme" Jian from League of Legends team OMG had soon been removed from the team roster during the 2021 summer split. On top of that, a part of adolescent players in esports youth training camps has been suspended from training under the new policy (Chen and Zhang 2021).

Streaming
In April 2022, The National Radio and Television Administration (NRTA) announced that platforms of all kinds were prohibited to live streaming video games that were not approved by the authority. Particularly, the live streaming of foreign games should not be carried out without approval for they might contain abnormal aesthetics and harmful celebrity fan culture, as claimed by the NRTA. Games like Elden Ring, which was a hit on Chinese game live streaming platforms earlier in 2022, are now blocked to live streams (Yu and Ye 2022).

Issues Raised by the Regulation

The persistent regulation raises issues for foreign game companies. Foreign games not only need to be published by a Chinese publisher but they are also allowed into the Chinese game market in

far fewer quantities than local Chinese games. The recent regulators have been more explicitly advocating for games that pursue “Chinese values,” making it more complicated for developers to align their titles with what is approvable by regulators (Camilo 2021).

The regulation of game content has cost a fair amount of money and effort for local and foreign game companies. They need to redesign and implement products corresponding to the regulation. Giants like Tencent and Netease who had existing youth modes have to accept re-design costs due to the new policy (Harrison 2022). The turmoil also adds uncertainty for investors and developers across hundreds of disparate titles and platforms (Bloomberg 2021).

The playtime restrictions result in a steep decline in China’s mobile gaming revenue. The gross sales revenue of the industry grew 6.4% in 2021, which is a sharp reduction from 20.7% in 2020. The increasing rate of gamers also declined from 3.7% to 0.22% (GamingonPhone 2021). The regulation has also led to counteractions. Chinese teenagers have used VPNs to play pirated or unauthorized game versions. High demand from young gamers has now also created a cottage industry dedicated to providing minors with fake adult IDs for bypassing the real-name registration (Borak 2021).

The final issue comes from the age limitation for esports players. The 2019 regulation has had a huge impact on China’s esports performance. The number of Chinese youth trainees has decreased as no other countries have issued similar restrictions. The future competitiveness of Chinese exports declined. Major international esports titles like League of Legends, Dota 2, PUBG, and CS: GO are influenced most in China (Chen and Zhang 2021).

Future Regulations

The regulation has not reached its end. Parents and teachers in China play key roles in curbing gaming addiction. They have still complained the restrictions are too generous and had been laxly enforced after the announcement of the newest regulation (Buckley 2021). According to NPPA, it would increase the frequency and intensity of inspections for online gaming (Goh 2021). China’s recent spate of regulations on cyberspace and tech companies represents the ongoing strengthening of social control in the online environment (Brooke 2021). Video games, as one of the cores of cyberspace, inevitably would become once again the victim of this ever-lasting “pathological” versus “productive” dichotomy (Zhang 2013, 2).

-K.C., Spring 2022

References

Bloomberg. 2021. “China Slows Game Approvals to Enforce Strict New Rules.” *Bloomberg.com*, September 16, 2021. https://www.bloomberg.com/news/articles/2021-09-16/china-is-said-to-slow-game-approvals-to-enforce-strict-new-rules.

Borak, Masha. 2020. “China’s Kids Are Coming up with Creative Ways to Keep Playing Games.” South China Morning Post. June 29, 2020. https://www.scmp.com/abacus/games/article/3090778/fake-ids-and-smartphone-arcades-how-kids-china-defy-anti-addiction.

Brooke, Sofia. 2021. “What to Make of the New Regulations in China’s Online Gaming Industry.” China Briefing News. October 5, 2021. https://www.china-briefing.com/news/what-to-make-of-the-new-regulations-in-china-online-gaming-industry/.

Buckley, Chris. 2021. “China Tightens Limits for Young Online Gamers and Bans School Night Play.” *The New York Times*, August 30, 2021, sec. Business. https://www.nytimes.com/2021/08/30/business/media/china-online-games.html.

Camilo, Daniel. 2021. “How China’s Gaming Regulations Affect Its Market and the Rest of the Industry.” GamesIndustry.biz. October 20, 2021. https://www.gamesindustry.biz/articles/2021-10-20-how-chinas-gaming-regulations-affect-its-market-and-the-rest-of-the-global-industry.

Castern, Paul. 2014. “China Suspends Ban on Video Game Consoles after More than a Decade.” *Reuters*, January 7, 2014, sec. Industrials. https://www.reuters.com/article/us-china-gamesconsoles/china-suspends-ban-on-video-game-consoles-after-more-than-a-decade-idUSBREA0606C20140107.

Chen, Eddie, and Yinan Zhang. 2021. “How China’s New Regulations Will Impact the Esports Industry.” Mailman Group. September 24, 2021. https://www.mailmangroup.com/post/how-china-s-new-regulations-will-impact-the-esports-industry#:~:text=18%20years%20old%20is%20widely.

GamingonPhone. 2021. “China’s Mobile Gaming Revenue in 2021 Suffers a Steep Decline amidst Government Playtime Restrictions.” GamingonPhone. December 18, 2021. https://gamingonphone.com/news/chinas-mobile-gaming-revenue-in-2021-suffers-a-steep-decline/.

Goh, Brenda. 2021. “Three Hours a Week: Play Time’s over for China’s Young Video Gamers.” Reuters. August 30, 2021. https://www.reuters.com/world/china/china-rolls-out-new-rules-minors-online-gaming-xinhua-2021-08-30/.

Harrison, Christian. 2022. “China Tightens Regulation on Gaming, Livestreaming Services Again.” Dot Esports. March 15, 2022. https://dotesports.com/general/news/china-tightens-regulation-on-gaming-livestreaming-services-again.

Henken, William. 2021. “Video Game Addiction: China Fights ‘Electronic Drugs.’” Addiction Center. September 22, 2021. https://www.addictioncenter.com/community/video-game-addiction-china-fights-electronic-drugs/.

Lai, Richard. 2013. “China’s Complicated History with Video Games: When a Ban Isn’t Really a Ban.” Engadget. January 30, 2013. https://www.engadget.com/2013-01-30-china-console-ban.html.

Liao, Rita. 2021. “A Trove of Imported Console Games Vanish from Chinese Online Stores.” TechCrunch. March 30, 2021. https://techcrunch.com/2021/03/30/console-game-china-pulled-ecommerce/.

Mcgregor, Grady. 2021. “China’s Gaming Market Was Built on Addictive Games. Can Beijing Stop Kids from Playing Them?” Fortune. September 3, 2021. https://fortune.com/2021/09/03/china-video-gaming-mobile-smartphone-addiction-free-to-play/.

Niko Partners. 2020. “Game Regulations in China: Everything You Need to Know.” Niko Partners. February 2, 2020. https://nikopartners.com/game-regulations-in-china-everything-you-need-to-know/.

NPPA. 2021. “国家新闻出版署-通知公示-国家新闻出版署关于进一步严格管理 切实防止未成年人沉迷网络游戏的通知.” Www.nppa.gov.cn. August 30, 2021. https://www.nppa.gov.cn/nppa/contents/279/98792.shtml.

Richman, Olivia. 2019. “China Bans the Word ‘Kill’ from Video Games as Restrictions Continue.” WIN.gg. May 20, 2019. https://win.gg/news/china-bans-the-word-kill-from-video-games-as-restrictions-continue/.

That's Shanghai. 2017. “#TBT: A History of Chinese Video Games.” That’s Online. September 7, 2017. https://www.thatsmags.com/shanghai/post/20541/tbt-a-history-of-chinese-video-games.

Yu, Sophie, and Josh Ye. 2022. "In Latest Gaming Crackdown, China Bans Livestreaming of Unauthorised Titles." *Reuters*, April 15, 2022, sec. China. https://www.reuters.com/world/china/chinas-broadcasting-regulator-ban-livestreaming-games-without-approval-2022-04-15/.

Zhang, Lin. 2013. "Productive vs. Pathological: The Contested Space of Video Games in Post-Reform China (1980s–2012)." *International Journal of Communication* 7 (0): 1–21. https://ijoc.org/index.php/ijoc/article/view/2066.

China, Labor Politics

Overview

Chinese video game industry, as one of the world's largest digital game markets, increased its player base to 7.2 billion, generating $27.8 billion in market revenue despite the global pandemic (Huang 2021). In 2020, Chinese game companies specializing in game development, publishing and operation provided over 700,000 jobs to the market (Analysis 2021). Many other industries, including film, music, and television, have collaborated with the game industry in recent years, resulting in more jobs, such as esports staff and professional streamers. In 2019, there were over three million streamers in game live streaming (Sina 2019).

Because of the rapid growth of the game industry and the emergence of occupations that do not conform to existing labor relations, China has yet to develop comprehensive labor laws and regulations, resulting in a slew of labor issues. Labor issues refer to the violations of workers' rights. Labor issues in China's game industry manifest as discrimination and harassment at work, overtime and misclassification work, wrongful discharge employment, and unfair wages and benefits, which are attributed to a lack of a specific set of laws, the high cost of protecting rights, the unawareness of workers' rights, and the absence of industrial labor unions (Legal Daily 2021).

Crunch in the Chinese Video Game Industry

Crunch in the video game industry refers to compulsory overtime work without getting paid. Game companies often rely on crunch time to meet the hard deadlines in the process of developing a game (Consalvo 2008). Crunch in the Chinese game industry often manifests as unreasonable working hours systems such as the "996 working hour system" and the "big/small week" policy. The "996 working hour system" is an unofficial work schedule that forces employees to work from 9 am to 9 pm, six days a week without extra pay for the extra hours. A "big/small week" policy is a practice of mixing five-day work weeks and six-day work weeks, where employees will have a six-day work week after a normal five-day work week (China Briefing News 2021).

According to the "2019 White-collar 996 Working System Report," 17.18% of employees said their companies have implemented the 996 system, and 22.48% of them reported that their companies have this intention (Zhilian Zhaopin 2019). Even for those companies that don't follow the 996 system, working overtime without getting paid is the majority of cases. Only 18.05% of employees do not work overtime. Among them, most workers work overtime less than 3 hours a week, and more than 20% work 10 hours or more overtime a week (Zhilian Zhaopin 2019). For the Internet and electronics industries, which the video game industry is

considered part of, the report shows that 73.77% of workers don’t get paid for overtime work (Zhilian Zhaopin 2019).

Crunch undermines the rights of employees by seriously affecting their health, squeezing their right to a normal life, and creating a hostile competitive environment. The "2019 Internet Industry Talent Development Report" shows that 74.87% of employees believe they lack exercise and 70.22% feel they do not get enough sleep. In January 2021, an employee of Pinduoduo, a Chinese e-commerce company, died suddenly (Wang 2021). If employees reject to work overtime, their bonuses will be reduced and hurt their promotions and raises (Legal Daily 2019). Companies normalize excessive work time in favor of their interests. In fact, according to Article 36 and 41 of the Labor Law, these unreasonable working systems can be illegal if employees are forced to work overtime without asking permission or if they are forced to work overtime more than 3 hours per day or 36 hours per month without being paid under these systems. The standard working time in China is 8 hours per day, 40 hours per week.

Although the Chinese game industry is governed by Chinese labor laws, it lacks strong means to enforce. In the case of uncontrolled overtime work in the industry, many companies prefer to violate the law by paying fines and to form a cost advantage over other enterprises in the same industry. Other enterprises will follow up either actively or passively, thus leading to a proliferation of industry-wide overtime (Legal Daily 2021). Moreover, labor arbitration and litigation require handing materials in real names, which generates pressure to be identified and rejected by the whole industry in the future (Si 2021). Certain employees are fearful of defending their rights due to the high risk, while others believe they are not being subjected to unfair wages and benefits due to the ignorance of their rights (Legal Daily 2021).

Sexism in the Chinese Video Game Industry

Sexism is a term that refers to prejudice or discrimination against people based on their sexual orientation. Sexism in the Chinese game industry frequently manifests itself in the form of sexual harassment and insult at the workplace, unequal pay for equal work, and difficulties for female game employees in terms of career development and promotion, which severely undermine the rights of female employees.

According to a 2015 China Gaming Industry Report, women make up approximately 10% of the workforce in China's 140 billion yuan ($20.33 billion) video game market (Global Times 2017). According to Gamma Data's “2018 China Game Industry Report,” female employees account for 27.3% of the entire game industry. Although the number of female practitioners is rising, women rarely have the opportunity to work in critical positions on game development teams, such as programmers and designers (Sun 2020). Women were suspected of being incapable of working long hours under pressure and of lacking the creativity necessary to create good games.

In addition, female employees in the game industry are often subject to sexual harassment. In 2015, a Tencent game development team released a recruitment advertisement featuring female breasts and a male masturbating in the background. Alibaba hires attractive women to serve as “programmer motivators”. According to New York-based Human Rights Watch, Baidu, Alibaba and Tencent have repeatedly posted job postings boasting of "pretty girls" in their companies (Huang 2018). Sexual harassments proliferate in the industry because a lack of a clear legal definition. Although the Law of the People's Republic of China on the Protection of Women's Rights and Interests touches upon the concept of sexual harassment, it doesn’t specify the behaviours and raises examples. According to Article 101 of the Civil Code, companies, as commercial organizations, have a clear legal obligation to prevent sexual harassment, but there is no clear definition of sexual harassment in the document. Without a definition, the numerous sexual insults that significantly harm female workers are ignored (Jiang 2021).

As China's feminist movement grows, more employees become aware of sexual harassment and other unfair workplace practices, compelling businesses to make changes. Alibaba announced the establishment of the Working Environment Committee on August 12, 2021. The Working Environment Committee will serve as a decision-making body for issues relating to the working environment, including anti-sexual harassment (The Beijing News 2021). Bytedance also released an anti-discrimination and anti-harassment policy in November 2020, according to a Bytedance employee. Sexual harassment is defined fairly clearly in the regulation, as are the standards for punishment (Jiang 2021).

- L.S., Fall 2021

References

Analysys. 2021. *中国游戏行业人才供需专题分析2021－易观智库.* Accessed September 20, 2021. https://www.shangyexinzhi.com/article/4213262.html.

Consalvo, Mia. 2008. "Crunched by Passion: Women Game Developers and Workplace Challenges." Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming. 177-91.

China Briefing News. 2021. "‘996’ Is Ruled Illegal: Understanding China's Changing Labor System.” Accessed September 13, 2021. https://www.china-briefing.com/news/996-is-ruled-illegal-understanding-chinas-changing-labor-system/.

Gejun Huang. 2021. *“Social Capital and Venture Creation: Identifying Entrepreneurial Opportunities in the Chinese Digital Game Industry.”* International Journal of Communication (19328036) 15 (January): 2355–77. https://search-ebscohost-com.proxy.library.nyu.edu/login.aspx?direct=true&db=ofm&AN=152907133&site=eds-live.

Global Times. 2017. n.d. “A Proliferation of Gender Bias Means There Is Still No Room at the Inn for Women in China's Gaming Industry.” Global Times. Accessed April 24, 2017. https://www.globaltimes.cn/content/1043826.shtml

Huang, Ruili. 黄瑞黎. 2018. “程序员鼓励师？中国科技公司里的‘漂亮女孩‘们.” The New York Times. The New York Times. April 25. https://cn.nytimes.com/china/20180425/china-women-technology/.

Jiang, Qianling. 2021. 大厂性骚扰的维权黑洞：组织为什么不作为？Accessed August 13, 2021. https://m.jiemian.com/article/6478158.html

Legal Daily. 2021. 法治日报——2021年01月15日——法治经纬—— "工作致死"困局亟待劳动法律破解. Accessed January 15, 2021. http://epaper.legaldaily.com.cn/fzrb/content/20210115/Article104003GN.htm.

Legal Daily. 2019. *互联网长期加班成常态，新兴行业劳动者权益保障待强化*.Accessed December 23, 2019. http://news.xhby.net/index/201912/t20191223_6451352.shtml

Sina. 2019.“游戏直播Q1大盘点：95%主播礼物收入不足500元.” n.d. *游戏直播Q1盘点：快手成黑马_新浪游戏_手机新浪网*. Accessed April 12, 2019. https://games.sina.cn/cyfw/cyxw/2019-04-12/detail-ihvhiewr5215840.d.html.

Si Ying. 2021.“反抗‘996’：‘公司作息表‘走红网络，中国劳工维权新模式？.” n.d. BBC News 中文. BBC. Accessed October 25, 2021. https://www.bbc.com/zhongwen/simp/chinese-news-58992425.

The Beijing News. 2021. 阿里公布反性骚扰机制化工作进展：“无条件支持员工拒绝劝酒”Accessed August 12, 2021. https://news.bjd.com.cn/2021/08/12/150151.shtml

Wang, Vivian. 2021. “Worker Deaths Put Big Tech in China Under Scrutiny.” The New York Times. The New York Times. February 1. https://www.nytimes.com/2021/02/01/business/china-technology-worker-deaths.html.

Zhilian Zhaopin. 2019. 智联招聘：2019年互联网产业人才发展报告. Accessed October 20, 2019. http://www.199it.com/archives/953293.html

China, Sexism

Overview

The Chinese gaming industry, a realm thriving with over 300 million female gamers constituting 46.2% of the total gamer base between 2018 and 2019, faces a deep-seated issue of sexism (GPC and IPC 2019). This problem not only manifests through discriminatory game content, harassment, and stigmatization but also reflects a broader societal challenge in China. The World Economic Forum's "Global Gender Gap Report 2022" positions China at 102nd out of 146 economies in terms of gender inequality. Female participants in the Chinese video game industry, despite contributing significantly to its growth and generating RMB 52.68 billion in sales revenue (22.8% of the entire gaming market revenue), continue to endure discrimination and prejudice (GPC and IPC 2019). The industry's sexist dynamics mirror larger societal patterns, exploiting existing prejudices and power imbalances. The increased involvement of women in the video game sector, alongside persistent discrimination, has sparked a collective effort from the public and industry professionals to confront and address sexism in the Chinese gaming landscape.

History of Sexism & Inequality in Workplace

China's 2,000-year feudal history has seen the emergence of a rigid set of moral norms, deeply rooted in sexism, binding women to the private sphere and turning them into reproductive tools for the patriarchy's needs (*Women of China* 2017). This pervasive social structure results in a pronounced gender imbalance, particularly evident in unfair workplace practices. Job opportunities for women remain skewed, with 19 percent of civil service postings in China favoring male candidates in 2020, while other positions specify that female candidates should already have children. Even upon employment, cultural biases persist, limiting women's access to leadership roles and certain fields, and contributing to wage gaps—where, in 2019, women in China earned only 77% of their male counterparts in similar positions (Nadworny 2021).

The video game industry reflects this gender inequality, with women comprising only 27.3% of the workforce in China in 2018, notably lower than the overall societal employment rate of 47.3% during the same period (Li 2020). Female roles within the industry are often confined to less significant positions, such as cabaret dancers and game hostesses, both subject to the preferences of male gamers. Stereotypes persist, deeming women unsuitable for roles in game development and operations, citing their perceived disinterest and lack of proficiency in technically complex "hardcore games." Moreover, female employees frequently encounter dismissals due to pregnancy; all these factors place significant constraints on female's participation and advancement within the gaming industry (Global Times 2017). Furthermore, prominent Chinese internet companies, such as Baidu, Alibaba, and Tencent, have encountered instances of sexual harassment controversies, exemplified by the sexism controversy at Tencent's annual meeting in 2017 (Lu 2021; Zhang 2017). This issue extends to the video game-related industry, notably with China's eSports giant, EDG (Edward Gaming), exposed in 2020 for condoning sexual harassment and pressuring victim to resign (Wanplus 2020).

Gender Issues in Game Design: Representation and Narrative

The unequal power dynamics experienced by female practitioners in the video game industry are prominently manifested in male-centric game design, including game content and narrative elements.

Virtual female characters in video games are primarily crafted to gratify the visual desires of a predominantly male player base, with their narrative role and significance often relegated to a secondary consideration. Consequently, these characters frequently exhibit amplified and explicitly sexualized features, prioritizing attractiveness over functional attributes. Such portrayals contribute to the perpetuation of stereotypes surrounding sexual allure, aligning with the preferences of male viewers. These characters are typically depicted as young or adult women with pale skin, idealized body proportions, revealing clothing, and a strong emphasis on sensuality (Du 2022).

Illustratively, in *Honor of Kings*, a popular Chinese mobile game, data from February 1, 2018, revealed that among the game's 203 human-image characters, only 17.8% were middle-aged or older, and all were male. 93.2% of female characters displayed explicit female sexuality, all portrayed as adult women. The absence of middle-aged and elderly female characters, the intense concentration on the depiction of female characters' physical sexuality, and the perpetuation of youthful aesthetics suggest an "eternal maiden" archetype, reinforcing societal expectations of perpetual youth in a patriarchal context, thereby distorting the reality of women's existence (Wu 2019).

Concurrently, character design, storyline, and game rule settings in the video game world contribute to the perpetuation of unequal gender dynamics rooted in outdated assumptions. Male characters are typically depicted as physically and intellectually strong, while female characters are often portrayed as delicate and dependent, existing as objects possessed, owned, and enjoyed by male characters. For example, *Chinese Paladin: Sword and Fairy*, a classic role-playing PC game from 1995, revolves around a love triangle involving two women and one man, reinforcing the heteronormative framework of male strength and female weakness. A similar narrative pattern is observed in the female-oriented mobile game *Mr. Love: Dream Date* from 2017, where the central focus remains on the female protagonist's romance with four idealized boyfriends, rather than devoting the attention to her career crisis and challenging gender norms, thus perpetuating existing societal expectations (Liu and Lai 2022).

Harassment for Players and Other Participants

In a society marked by misogyny, discrimination against women becomes even more apparent beyond the confines of game content.

In a study of female gamers' experiences in China, conducted by Tingting Liu at Jinan University, male gamers often harbor the belief that skills necessary for top-tier gaming are exclusive to men (Shen 2020). Female gamers endure pervasive demeaning and stigmatization, being portrayed as reliant on men for gaming success and reduced to mere entertainment. Once their gender is revealed, they frequently face verbal and textual sexual harassment, including

invasive questions and insults tied to their femininity. This harassment has become ingrained in gaming culture, with discriminatory expressions normalized among male gamers and practitioners. For instance, after indie studio Game Science received acclaim for their game trailer, CEO Feng Ji made inappropriate comments involving uncomfortable jokes about male genitalia. However, when female gamers tried to challenge this culture, advocating for a boycott of *Black Myth: Wukong* due to discomfort with Feng''s comments, they were labeled "overly sensitive" and "politically correct." Similar hostility ensued in the *Honor of Kings* artist Wuxin incident, where female gamers leading a boycott faced mockery of their gaming skills and endured explicit insults on their female relatives and female genitalia, as well as slut-shaming on social media (Liang and Liu 2022).

Discrimination, stigmatization, and exclusion persist in industries linked to video games, particularly with the growing presence of female esports fans (China Audio-video and Digital Publishing Association 2022). Their impact is viewed as a threat to the established male dominance . Male esports fans employ their knowledge and skills to marginalize women, questioning their motivations and reinforcing a perceived superiority. This bias, rooted in the traditional perception of esports as a 'male domain,' alienates female fans, leading to dissatisfaction and an identity crisis as they question the legitimacy of their right to engage in esports (Li and Xiong 2023).

Awakening of Feminism

Encouragingly, the rise of feminism in Chinese society has prompted increased awareness among female gamers, practitioners, and participants in the video game industry regarding the prevalent sexism in the field. Efforts are being made to transform the status quo. Within games, female gamers are actively advocating for more liberated and diverse character designs that break free from the male gaze, along with demanding narratives catering to a more "female-oriented" perspective (Liang and Liu 2022). Beyond gaming, women are challenging sexism and traditional values in the workplace, striving to empower female contributors in the video game industry. Notably, concerns about the absence of female competitors in the Asian Games gaming program underscore their commitment to promoting inclusivity and equality (France 24 2023).

-Z.D. Fall 2023

References

World Economic Forum. 2022. "Global Gender Gap Report 2022." Accessed October 10, 2023. https://www.weforum.org/reports/global-gender-gap-report-2022/in-full.

GPC and IPC. "2019年中国游戏产业报道." Accessed October 10, 2023. 2019年中国游戏产业报告 (cgigc.com.cn).

China Audio-video and Digital Publishing Association. "《2022年中国电子竞技产业报告》正式发布." Accessed October 10, 2023. 《2022年中国电子竞技产业报告》正式发布_中国音像与数字出版协会 (cadpa.org.cn).

Women of China. 2017. "儒家传统思想与现代男女平等观念之辩." Accessed December 14, 2023. 中华全国妇女联合会-新闻 (women.org.cn)

Nadworny, Katie. "Gender Discrimination in the Chinese Workplace." SHRM, December 23, 2021. Accessed December 14, 2023. https://www.shrm.org/resourcesandtools/hr-topics/global-hr/pages/gender-discrimination-in-the-chinese-workplace-global-hr.aspx.

Li, Yixuan. “2020年中国女性游戏行业概览.” Leadleo. Accessed December 14, 2023. H3_AP202101181451759171_1.pdf (dfcfw.com)

Global Times. "Gender bias in China’s gaming industry." ECNS, April 24, 2017. Accessed December 14, 2023. Gender bias in China's gaming industry (ecns.cn)

Lu, Shen. "Misogyny at Alibaba and Baidu: The struggle of China’s female tech execs." protocol, January 27, 2021. Accessed December 14, 2023. https://www.protocol.com/china/women-chinese-tech-wolf-culture.

Zhang, Liping. "Video of Women on Their Knees Deals Blow to Tencent Image." SIXTH TONE, January 13, 2017. Accessed December 14, 2023. https://www.sixthtone.com/news/1815.

Wanplus. “如何看待EDG电子俱乐部员工疑似性骚扰一事？” Zhihu, September 13, 2020. Accessed December 14, 2023. https://www.zhihu.com/question/420823348.

Wu, Si. “性别僭越与年龄迟滞——《王者**荣耀》中的身体**拟像研究.” 中国青年研究, 2019,(01):57-63. Accessed October 10, 2023. Sexual Transgression and Age Delay: A Study of Body Mimicry in Glory of Kings - CNKI. Sexual Transgression and Age Delay: A Study of Body Mimicry in Glory of Kings - CNKI.

Du, Liang. “游戏论·性/别丨电子游戏的女性形象建构策略.” Accessed October 10, 2023. 游戏论·性/别丨电子游戏的女性形象建构策略_思想市场_澎湃新闻-The Paper

Liu, Tingtin, and Zishan Lai. “游戏论·性/别丨社会性别作为本土电子游戏的重要分析范.” Accessed October 10, 2023. 游戏论·性/别丨社会性别作为本土电子游戏的重要分析范畴_思想市场_澎湃新闻-The Paper.

Shen, Xinmei. “Sexism in gaming is rife in China and more stark than ever following comments from CEO behind Black Myth: Wukong.” South China Morning Post, September 22, 2020. Accessed December 14, 2023. What industry has a particular pernicious problem with sexism? | South China Morning Post (scmp.com)

Liang, Yutong, and Liu Liu. “中国女性玩家：永远困在最后一环.” The Initium, May 29, 2022. Accessed December 14, 2023.中国女性玩家：永远困在最后一环｜端传媒 Initium Media (theinitium.com)

Li, Minhua, and Huan Xiong. "Virtual Identities and Women’s Empowerment: The Implication of the Rise of Female Esports Fans in China." Sport in Society 26, no. 3 (2023): 431-453. DOI: 10.1080/17430437.2022.2158817.

France 24. “ESports makes debut as Asian Games medal event but women left behind.” France 24, September 24, 2023. Accessed December 14, 2023. https://www.france24.com/en/live-news/20230924-esports-makes-debut-as-asian-games-medal-event-but-women-left-behind.

China Digital Entertainment Expo & Conference (ChinaJoy)

Overview

China Digital Entertainment Expo & Conference, or more commonly referred to as ChinaJoy, is an "influential event in the global digital entertainment industry" which "showcases online games, console games, web games, hardware products related to digital entertainment" (ChinaJoy 2021). Chinajoy is organized by China Audio-video and Digital Publishing Association (CADPA), and Howell Expo, with the support from National Press and Publication Administration (NPPA) and Shanghai Municipal Government (ChinaJoy 2021). Described as China's largest gaming and digital entertainment exhibition, Chinajoy is held annually at Shanghai New International Expo Center usually during late July for 3 to 4 days (Farrar 2010). Events such as China Digital Entertainment Congress (CDEC), China Game Business Conference (CGBC), China Game Develops Conference (CGDC), ChinaJoy Cosplay Contest, and ChinaJoy Esports Tournament are held in conjunction with the show each year.

The Origin and Background

Planned to be held in late July 2003, the SARS CoV-1 epidemic delayed the first ChinaJoy to January 2004 and it was the only one that took place in Beijing, China. Said to be China's E3 (Electronic Entertainment Expo)—the biggest event of the year for the video game industry which takes place in LA, the first ChinaJoy attracted nearly 60,000 audiences and a total of 129 exhibitors (Gong 2004). The later ChinaJoy shows moved to Shanghai to take advantage of its geographical location as a transport hub of the world, and it has helped to attract broad domestic and foreign participants.

However, before the concept of ChinaJoy was introduced, the Chinese video game industry took a heavy hit. In response to the concerns of video game addiction and negative influence on the youth in China, the State Council of China passed a bill to ban the production, import, and sale of consoles and arcade machines in 2000 (Carsten 2014).
In 2003, Chinese government agencies led the publication of the Chinese gaming industry's first market report. Further, the Chinese government started including the video game industry into its 863 Program or State High-Tech Development Plan. Thus, the previously marginalized Chinese video game industry was legitimized (Gong 2004). Initiating and organizing ChinaJoy was one of the Chinese government's gestures to indicate its continuous support of the video game industry.

ChinaJoy Amidst the Development of Chinese Video Game Industry

ChinaJoy and its related conferences market their emphasis on the latest trends of the game industry, positioning themselves as events that "can fully keep up the development pace of the industry" (E4G 2013). In this way, the trend of ChinaJoy also reflects the development of China's digital game industry.

ChinaJoy has witnessed the rise of PC video games in China as the 2000 ban on game consoles yielded space for PC games to grow in China (Messner 2019). With the "remarkable expansion of broadband Internet and a marked increase in home computer ownership," the flourishing of Chinese Wangba (Internet cafés where people can play video games), and loose software piracy regulations, the PC video game market in China was fueled (Zhang 2013, 2397-2400). In early ChinaJoy shows, audiences waited in long lines to gain early access to PC games. Also, crowds formed to meet celebrity endorsers of PC games. These scenes captured the enthusiasm of PC video games at the moment.

ChinaJoy has stimulated the development of the Chinese mobile game industry. With the expectation of China's future fast development of 3G networks and adoption of smartphones, ChinaJoy's CGBC organized its first Mobile Entertainment Development Forum in 2006 (Sina 2006). Then in 2013, with the mature development of mobile Internet in China, ChinaJoy made "Games Composing Your Dream, Mobility Inspiring Future Vision" as its theme. Further, ChinaJoy 2013 upgraded the Mobile Entertainment Development Forum to an independent event—World Mobile Game Conference (WMGC), making it "a comprehensive game forum with special attention to mobile games" (E4G 2013).

ChinaJoy has also indicated that the game console market has great development potential in China. The 2000 ban on game consoles was not absolute: consoles such as Nintendo 64 rebranded under the Chinese iQue partnership and Sony's Playstation 2 were allowed to enter the market in China with restrictions (Liao 2015, 279). Therefore, Sony and Nintendo took advantage of the first ChinaJoy and exhibited their consoles to the audience. With the lifting of the console ban in 2014, ChinaJoy launched a new Arcade Console and Home Entertainment Expo (ACH) to welcome console manufacturers such as Microsoft and Sony to showcase their latest products (ChinaJoy 2014). According to CNBC, the console market is huge and it constitutes roughly 30% revenue of the global gaming market, but it's only 1% in China. Hence, independent developers along with game giants like Tencent and NetEase are all eying the market and developing titles (Kharpal 2021).

In addition, ChinaJoy has presented other trends of development such as virtual reality and Esports. ChinaJoy 2016 hosted the new Global Smart Entertainment Hardware Expo (eSmart) to feature virtual reality games and hardware (Zhang 2017). The first Shanghai Esports Week was

also announced at ChinaJoy 2019 and leading gaming companies such as Tencent, NetEase, Blizzard, Giant organized about 100 Esports events (Sina 2019).

The Relationship between ChinaJoy and the Chinese Government

ChinaJoy's main organizers and supporters are government agencies, thus the show carries a government background—a signal that the Chinese video game industry is heavily regulated by the government. Government officials also utilize their speech opportunities at the show to reveal regulators' attitude towards the video game industry.

For instance, at ChinaJoy 2008, NPPA's Vice Director Shulin Wu criticized video game developers and publishers for the first time in ChinaJoy history about their vicious competition and negative influence on the youth. Wu's speech echoed the strict government regulations to curb youth addiction since 2007. One major regulation was the Online Game Anti-Addiction System (OGAAS) which limited minors' video game playtime to 3 hours each day, "with longer playtime resulting in automatic deactivation or compromised in-game reward mechanisms" (King et al. 2017, 242-243).

Nevertheless, ChinaJoy has played a crucial role in bringing Chinese government officials (regulators), game developers and publishers, hardware manufacturers, customers, and the press together. ChinaJoy especially provided opportunities for foreign gaming companies to learn about the unique regulatory environment of China for their compliance.

Today

Although the SARS CoV-1 epidemic influenced the first ChinaJoy back in 2004, the more serious and ongoing COVID-19 pandemic did not stop the recent ChinaJoy shows in 2020 and 2021. While requiring COVID-19 test results, canceling all live performances, competitions, and handing out souvenirs, ChinaJoy 2021's show venue size still kept 156,000 square meters (about 168,0000 square feet).

Strict public health rules shrunk the attendance (attendance was 365,000 in 2019), but ChinaJoy 2021 partnered with major Chinese live streaming platforms such as TikTok, Kuaishou, Douyu, Bilibili, and Weibo to host ChinaJoy Plus and promote the show online. ChinaJoy 2021's theme was "Create Dreams with Technology and Win the Future with Fun," and it featured 4 key categories: the metaverse, ESports, cloud gaming, and going global—all globally popular topics (ChinaJoy 2021).

ChinaJoy has set up a B2C (Business to Customer) Area for gamers and a B2B (Business to Business) Area specifically for game companies to seek and establish business cooperation and

issue news releases. In the 4-day ChinaJoy 2017, business deal transactions that took place at the B2B Area exceeded 475 million dollars (Zhang 2017).

-Y.H., Fall 2021

References

Carsten, Paul. "China Suspends Ban on Video Game Consoles After More than a Decade." Reuters. Thomson Reuters, January 7, 2014. https://www.reuters.com/article/us-china-gamesconsoles/china-suspends-ban-on-video-game-consoles-after-more-than-a-decade-idUSBREA0606C20140107.

ChinaJoy. "China Digital Entertainment Expo and Conference (ChinaJoy)." About ChinaJoy. Accessed December 11, 2021. https://www.chinajoy.net/cjdhen/gy/gyzh/zhjs/.

ChinaJoy. "Three Highlights of ChinaJoy 2014." Business Wire, 2014. https://www.businesswire.com/news/home/20140615005122/en/Three-Highlights-of-ChinaJoy-2014.

ChinaJoy. "火热八月，中国5G+娱乐产业大会在沪顺利召开," 2021. https://www.chinajoy.net/c/2020-04-10/495219.shtml.

E4G. "An Interview with the ChinaJoy Team." Events For Gamers, July 18, 2013. https://www.eventsforgamers.com/an-interview-with-the-chinajoy-team/.

Farrar, Lara. "Everything to Play for: Eyeing China's Online Games Market." CNN International, August 4, 2010. https://web.archive.org/web/20120314205300/http://www.cnngo.com/shanghai/life/chinese-online-gaming-lures-more-foreign-faces-901300?quicktabs_2=2.

Gong, Meng. "ChinaJoy，中国人自己的E3 ." 信息产业报道, February 3, 2004. http://qikan.cqvip.com/Qikan/Article/Detail?id=9973921.

Kharpal, Arjun. "Game Consoles Were Once Banned in China. Now Chinese Developers Want a Slice of the $49 Billion Pie." CNBC. CNBC, August 16, 2021. https://www.cnbc.com/2021/08/16/chinese-games-developers-eye-a-slice-of-49-billion-console-market.html.

King, Daniel L., Paul H. Delfabbro, Young Yim Doh, Anise M. S. Wu, Daria J. Kuss, Ståle Pallesen, Rune Mentzoni, Natacha Carragher, and Hiroshi Sakuma. "Policy and Prevention Approaches for Disordered and Hazardous Gaming and Internet Use: An International Perspective - Prevention Science." SpringerLink. Springer US, July 4, 2017. https://link.springer.com/article/10.1007/s11121-017-0813-1.

Li, Xuezhen. "Chinajoy十年回顾," July 9, 2012. https://game.zol.com.cn/305/3056483.html.

Liao, Sara X. "Japanese Console Games Popularization in China." Games and Culture 11, no. 3 (2015): 275–97. https://doi.org/10.1177/1555412015583574.

Messner, Steven. "Censorship, Steam, and the Explosive Rise of PC Gaming in China." pcgamer. PC Gamer, May 23, 2019. https://www.pcgamer.com/its-time-to-pay-attention-to-china-inside-the-worlds-largest-pc-games-industry/.

Sina. "2019 ChinaJoy圆满闭幕 总入场人数36.47万人次再创新高." 2019 ChinaJoy圆满闭幕 总入场人数36.47万人次再创新高_产业服务-厂商新闻_新浪游戏_新浪网, August 6, 2019. http://games.sina.com.cn/y/n/2019-08-06/hytcitm7184900-p2.shtml.

Zhang, Lin. "Productive vs. Pathological: The Contested Space of Video Games in Post-Reform China (1980s–2012)." International Journal of Communication, 2013. https://ijoc.org/index.php/ijoc/article/view/2066.

Zhang, Yi. "第15届ChinaJoy落幕，近35万人次再创历史新高." Shanghai Observer, July 31, 2017. https://www.jfdaily.com/news/detail?id=60752.

Zhang, Yi. "第十六届ChinaJoy完美落幕，35万观展人次再创新高," August 7, 2018. https://www.shobserver.com/news/detail?id=99093.

China Indie Game Alliance (CiGA)

Overview

China indie Game Alliance, abbreviation as CiGA, was a non-profit organization founded in 2015 by Chinese game developer Simon Zhu. This alliance is currently the largest independent game alliance in China, organizing various indie-game-related events. Simon Zhu, the founder, is also the organizer of the main events. “CiGA [is one of the] representative community powers with professional specialization [… It] is a loose alliance. It bridges gaps between indie game studios and resources.” (Zhao 2018) In Addition to what Zhao has described, CiGA “bridges gaps” by holding competitions, B2B conferences, and game expos. CiGA also displays several in-site resources linking to indie game publishers, investment, game localization studios, and voice/sound studios. The organization also serves as a bridge between the domestic and international game markets. When not holding events to the public, CiGA also held conferences with platforms to facilitate communication between Chinese developers and overseas platforms.

Membership

CiGA does not hold any forms of membership. According to its founder and organizer Simon Zhu, CiGA does not have a membership system due to the immaturity of the indie game developers. Zhu also indicated that CiGA was in a relatively loose form which can better reflect the group’s will at the moment (Zhu 2021). A formal membership system will require the members to take responsibility and bear obligations in the mature game industry. However, Zhu explained that it is not possible in the short term due to the underdevelopment of the Chinese indie game industry. CiGA believes that there must be a mature industry, a well-developed community, and a more thorough social awareness of indie games in China for further membership formation.

History and Future

In 2015, the Chinese indie game market was relatively closed: Besides being recognized as a vast consumer market, the Chinese market still lacked understanding and attention from international developers. Responding to this condition, the founder and organizer Simon Zhu expressed his concern. According to Zhu, “since games were recognized as a content culture industry, the rise of domestic and international recognition had to start from the content of the game itself” (Zhu 2021). Thus, he established the first indie game alliance in China, CiGA, to prove a platform to present the content. Simon Zhu described the Chinese game industry’s situation as “Tencent and NetEase get headlines, but there is less awareness around the independent studios” (GamesIndustry Staff 2020). He also touched on the original goal of establishing an alliance as changing this situation and increasing recognition towards Chinese indie game developers. According to Zhu, CiGA had to take responsibility for the whole indie game community as a

game alliance. Taking responsibility, CiGA has had conferences with Nintendo to enhance the developing experience of Chinese developers targeting Nintendo Switch. CiGA had also been making efforts in other aspects, including investment, development, coordination, distribution, etc. As the Chinese market policies tightened in recent years, CiGA expresses its concern over the possibility of the increase in demand for overseas markets (Zhu 2021). CiGA will prepare to establish relevant resources and communications to resolve this situation.

Events

CiGA holds yearly events intending to facilitate communication and engagement opportunities for domestic developers and the global community. The events mostly fit into three categories, game competitions, the B2B conference, and the indie game exhibitions.

Competitions

CiGA has been hosting game-developing competitions since its establishment.
The *IndiePlay Chinese Indie Game Competition hosted by CiGA*, supported by indienova, IGDA, indielight, and many other media companies, is targeted at different product platforms, including PC, consoles, mobiles, and VR (CiGA 2021). The awards categorized from best game to best designs of sound or visual. Every year, the finalists of indiePlay awards and the best works of *CiGA Game Jam* will be displayed and tested at the *WePlay Expo* at the end of the year. At each year's event, IndiePlay invites renowned seniors from the global game industry to open the awards every year, including game developers and actors in games worldwide.
CiGA has also organized the *Global Game Jam* China jammer site since 2017 in various Chinese cities. *Global Game Jam* (GGJ) is the most significant worldwide game development hackathon, which "is all condensed into a 48-hour development cycle" (GGJ 2021). Yearly, the Global Game Jam will be held in different countries with a different theme that GGJ provides. During CiGA's co-hosting, the number of jammers that attended through the Chinese sites rose from 138 to 1065. While holding in person, CiGA cooperates with media platform bilibil.com for people interested in GGJ to experience the atmosphere of live game development through live streaming.

Figure 1 Global Game Jam 2018 Chengdu Site (www.ciga.me)

Besides *Global Game Jam*, CiGA also hosts another Chinese-language game jam, the *CiGA Game Jam* (CGJ). CGJ is the Chinese-language gaming community's largest in-person game jam event, with almost the same structure as the *Global Game Jam*. Unfortunately, the 2020 CiGA Game Jam was adjusted online due to the COVID-19 pandemic. Even with inconvenience, 2020 CiGA Game Jam still had more than 2,000 developers registered online, formed more than 350 teams, and completed more than 300 game demos (游戏便当 2021). The best game created in CGJ will be awarded as the best game jam game during the *IndiePlay Chinese Indie Game Competition*.

B2B Connections

CiGA Connects is a B2B event under CiGA that serves as a display and communication platform for the resources within the global game industry. In CiGA Connects, there are CiGA Developers Conference, Onsite B2B zone, Online Meeting Platforms, featured showcase, and convenient business zone (CiGA, About CiGA Connects 2021). 2021 is the first year that CiGA has started to hold CiGA Connects. Unfortunately, the event was canceled due to COVID-19 policies.
Once an individual event, *CiGA Developers Conference* (CiGADC) is a B2B conference hosted by CiGA to connect developers and other labor forces in the game industry. From 2021, the conference will be held within the schedule of CiGA Connects. The conference covered most of the fields within a game's production process, from the design, visual, sound, program, storytelling, to the publishing, platform, and marketing aspects (CiGADC 2021). The guest speakers are individuals or organizations from the globe that have made special efforts for or have multiple experiences in the game industry, including developers from successful indie studios to managers of triple-A companies. Unfortunately, the 2021 CiGADC in CiGA Connects was also canceled because of COVID-19 policies.

Figure 2 The companies involved in CiGA Connects 2021 (CiGA WeChat Official Account)

Game Exhibition

CiGA has organized the WePlay Expo since 2017. As described on its official website, "WePlay Expo is the largest gaming culture festival in China where you can play games the entire time with a fresh perspective you might have never had before. (WePlay 2021)" It is an exposition open to game developers and fans. "[M]ore and more game companies from all over the world had taken WePlay as the perfect event to connect to local markets covering media companies, KOL, partners and B2B matchings (Events4Gamers 2021)." In WePlay Expo, CiGA invites developers to share their experience in developing games and their opinion on the general game industry. In 2021, the fifth anniversary of WePlay Expo took place from December 11-12 in Shanghai, China. According to a later announcement, this event switched from fully in-person to half online with only a small number of in-person audiences due to COVID 19.

-J.J., Fall 2021

References

游戏便当. 2021. 游戏便当. Accessed December 6, 2021. https://www.youxibd.com/v2/gamejam/cgj2021.

CiGA. 2021. *China indie Game Alliance Official Website.* Accessed Dec 21, 2021. https://www.ciga.me/english.

CiGADC. 2021. *2021 CiGA Developers Conference Agenda.* December. Accessed December 6, 2021. https://www.cigadc.com/.

Events4Gamers. 2021. *WePlay Expo 2021.* https://www.eventsforgamers.com/event/weplay-expo-2021/.

GamesIndustry Staff. 2020. *GI 100 | Game Changers -- Part Nine.* December 17. Accessed December 6, 2021. https://www.gamesindustry.biz/articles/2020-12-17-gi-100-game-changers-part-nine.

GGJ. 2021. *Global Game Jam.* Accessed December 15, 2021. https://globalgamejam.org/.

indiePlay. 2021. *2021 indiePlay中国独立游戏大赛报名开始.* May 13. Accessed December 5, 2021. https://www.indieplay.cn/blog/2021-indieplay.

Simon Zhu (the founder of CiGA) in discussion with the author, December 2021.

WePlay. 2021. *Celebrate the 5th Anniversary! WePlay Expo will be held, live, on 11-12 Dec, 2021, Shanghai, China.* March 21. Accessed December 6, 2021. https://www.weplaymore.com/blog/5th.

WePlay Expo. 2021. *CiGA Connects / WePlay Expo 2021 Information.* October 26. Accessed December 6, 2021. https://fancons.com/events/info/17470/ciga-connects---weplay-expo-2021.

Zhao, Runhua. 2018. *China's indie game makers guard their independence in a greedy industry.* June 19. Accessed December 6, 2020. https://technode.com/2018/06/19/china-indie-games/.

Cosmetics

Overview

Cosmetics are in-game items or assets used to customize one's avatar or interface that does not affect the game's overall trajectory or end goal. Cosmetics include "skins," costumes, and other add-ons that must either be purchased directly / with virtual currency or unlocked throughout the game's progression. Although cosmetics are purely superficial additions, their value has increased throughout recent years and often assists in generating massive profit for publishers along with other in-game goods (Cai 2022). While players purchase cosmetics for a variety of psychological or socially perceived reasons, they have nonetheless become a prominent part of the in-game experience, monetization techniques in the industry overall, and consequently have led to individual consumer profit on third-party sites through "skins" gambling.

A Brief History

Although the video game industry operated on a conventional business model for a majority of its existence, the adoption of new concepts such as loot boxes and the "freemium" method in recent years emphasizes in-game purchases *after* free initial consumption (Cai 2022). Cosmetics fit in this mid-2000s model, first making a negatively received appearance in *The Elder Scrolls IV: Oblivion* as horse armor (figure 1) that in no way advanced the animal's efficiency (Lim 2018).

(figure 1)

Additionally, Microsoft released a $2.50 seasonal outfit for *Kameo: Elements of Powe*r in 2005, along with new vehicles and map designs as part of their attempt to profit further from microtransactions (Williams 2017). Around this time, the video game industry was experiencing a transition of marketing video games as a "toy" to "an entertainment service" (Williams 2017). In the late 2000s, Electronic Arts (EA) trailed the "Project Ten Dollar" initiative in response to consumers selling their used games – a process from which EA was gaining zero profit – and released a code along with new games that would unlock cosmetic items such as characters and outfits (Williams 2017). This reinforcement for consumers to purchase their video games new rather than from sites like eBay was a large step in the direction of new monetization techniques surrounding decorative assets. While these efforts were not lucrative enough to make a dent in

the gaming industry's traditional business practices themselves at the time, these instances of direct microtransactions set the stage for consumers regularly purchasing cosmetics.

Cosmetics as a Monetization Technique

Although consumers originally deemed cosmetic microtransactions useless, the rise of social media and mobile games in the early 2010s prompted Triple A companies to search for new ways to profit (Williams 2017). Developers were jolted by financial difficulties prompted by these technological innovations, and hence resisted with a microtransaction-heavy model that was "Free-2-Play" (F2P) and would both maintain production quality and cut costs (Okereke 2020).

Both online and video games released loot boxes, which often contained different avatars and costumes in a randomized package (Lim 2018). Controversy surrounding the ethics of loot boxes in the late-2010s led to an increase of game directors not only featuring cosmetic microtransactions but also implementing them as part of their "core philosophy" (Fennimore 2020, 34). The freedom of purchasing cosmetic items – random or otherwise – without a competitive advantage was appealing, so much so that early, successful Season Passes (a feature providing players access to planned downloadable content) such as EA and Rockstar Games included cosmetics such as premium outfits and cases (Williams 2017). With the rise of Season Passes in 2017, revenue from Triple A F2P games such as League of Legends came predominantly from microtransactions, with cosmetics comprising a significant portion. Fortnite, an extremely well-known video game, also utilizes cosmetics such as skins and emotes as their key monetization driver through "Battle Passes" (Joseph 2021). 77% of Fortnite players have made at least one of these in-game purchases, including Battle Passes ("Is Fortnite" 2022).

Although this F2P and microtransaction-heavy business model proved lucrative in the industry, some games received a widely negative reputation for utilizing microtransactions in an apparent devious manner. In 2017, EA's "Star Wars Battlefront II" hit the shelves, and consumers quickly realized that popular skins displayed in the game's trailer could not be accessed until either purchased or unlocked through strenuous gameplay (Okereke 2020). EA's stock consequentially dropped 8.5 percent (Okereke 2020), causing further dialogue about the morality of cosmetics both among consumers and academic literature.

Psychology

Gamers' psychological motivations are key in determining cosmetics' success in the video game industry. In popular games such as Fortnite, social status and feelings of "immersion" play a large role in whether a gamer decides to purchase an item (Cleghorn and Griffiths 2015). The idea of quasi-acceptance in relation to diversity additionally plays a role in representation as a driving factor when there are limited edition, ethnically diverse skins available for purchase (Reza et al, 2020). Emotional attachment to an avatar as a method of self-expression encourages players to even go as far to indulge in black markets to purchase cosmetics; it is therefore not only encouraged, but integral for video game corporations to introduce an "official transaction system" if they do not have one already (Cleghorn and Griffiths 2015, 101).

Skins Gambling

Cosmetic items known as "skins" – decorative features available for purchase within the video game that changes an item or avatar's appearance – are often utilized for gambling purposes, particularly in Esports. One typically obtains skins by 1) directly purchasing them in-game, 2) winning them in-game after completing a level or challenge, and 3) opening a randomized loot box (Greer et al. 2019). Because rare skins can have a market value of thousands of dollars, they can not only be traded, but also exchanged for real-world cash or cryptocurrency (Greer et al. 2019).

Upon purchasing or acquiring these skins in a game, a player can bet with them as real-world currency on third-party websites unaffiliated with video game platforms (Adair 2021). These websites can be designed as a virtual casino, containing games of chance such as roulette, coin flips, and lotteries (Haskell 2017, 142). They can also be devised for Esports betting (Greer et al. 2019). Steam's Community Market itself provides a platform for gamers to sell their skins in exchange for Steam Wallet Funds; however, third-party websites often take advantage of this feature, allowing for players to sell their skins for cash (Hardenstein 2017). Skins gambling became extremely prevalent in recent years, with gamers spending over $7 billion in 2016 on wagering items from popular games in Esports such as *Counter-Strike: Global Offensive* ("Skin Betting" 2019). Other common games used in skin gambling include *PlayerUnknown Battlegrounds*, *Team Fortress 2*, *Dota 2*, and *Z1 Battle Royale* (Greer et al. 2019). Even loot box skeptics categorize purchasing these randomized items as a form of gambling in itself, and claim the euphoria gained from winning a rare item contributes to "problem gambling" (Okereke 2020). Although gambling suggests criminality and negative physical and mental effects for the user, very little has been done legally to prevent skins betting/gambling and the question of whether it is illegal remains (Hardenstein 2017).

-S.H., Spring 2022

References

Adair, Cam. 2021. "What Is Skins Gambling?" *Game Quitters*. Accessed 5 May 2022. https://gamequitters.com/skins-gambling/.

Cai, Xiaowei, Javier Cebollada, and Mónica Cortiñas. 2022. "A Grounded Theory Approach to Understanding In-Game Goods Purchase." PLoS ONE 17 (1): 1–27. Accessed 27 April 2022. doi:10.1371/journal.pone.0262998.

Cleghorn, Jack and Griffiths, Mark D. 2015. "Why do Gamers Buy 'Virtual Assets'? An Insight in to the Psychology Behind Purchase Behaviour". Digital Education Review. Accessed 6 May 2022. https://files.eric.ed.gov/fulltext/EJ1065003.pdf

Fennimore, John Joseph. 2020. "Are They Really Just Cosmetic? the Impact of Cosmetic Items on Fortnite's Gameplay and Game Design". *Theses and Dissertations*. 2494. Accessed 15 April 2022. https://dc.uwm.edu/etd/2494

Greer, Nancy, Matthew Rockloff, Matthew Browne, Nerilee Hing, and Daniel L. King. 2019. "Esports Betting and Skin Gambling: A Brief History." Journal of Gambling Issues 43 (December): 128–46. Accessed 2 May 2022. doi:10.4309/jgi.2019.43.8.

Hardenstein, Taylor Stanton. 2017. “Skins in the Game: Counter-Strike, Esports, and the Shady World of Online Gambling.” UNLV Gaming Law Journal 7 (2): 117–38. Accessed 5 May 2022. https://search-ebscohost-com.proxy.library.nyu.edu/login.aspx?direct=true&db=edshol&AN=edshol.hein.journals.unlvgalj7.14&site=eds-live.

Haskell, John Vrooman. 2017. “More than Just Skin(s) in the Game: How One Digital Video Game Item Is Being Used for Unregulated Gambling Purposes Online.” Journal of High Technology Law 18 (1): 125–60. Accessed 5 May 2022. https://search-ebscohost-com.proxy.library.nyu.edu/login.aspx?direct=true&db=edshol&AN=edshol.hein.journals.jhtl18.7&site=eds-live.

Joseph, Daniel. 2021. “Battle Pass Capitalism.” Manchester Metropolitan University, UK. Accessed 6 May 2022. https://journals.sagepub.com/doi/pdf/10.1177/1469540521993930

Lim, William. 2018. “Blood in the Water: A History of Microtransactions in the Video Game Industry.” *Medium*, Medium. Accessed 15 April 2022. https://williamlim3.medium.com/blood-in-the-water-a-history-of-microtransactions-in-the-video-game-industry-e5bf9e3de4da.

Okereke, Wesley. 2020. “Gamble-Boxes and Micro-Theft-Actions: Why Loot Boxes and Microtransactions Should Be Banned from Video Games.” Thurgood Marshall Law Review 45. No. 1 (Fall 2020): 57-74. Accessed 6 May 2022.

Reza, Alia et al. 2020. “‘I Like the Way the Skin Looks’: Player Perspectives on Aesthetic Appeal and Self-Representation with Video Game ‘Skins’”. iConference 2020 Proceedings, iSchools. Accessed 6 May 2022. http://hdl.handle.net/2142/106593

Williams, Mike. 2017. “The Harsh History of Gaming Microtransactions: From Horse Armor to Loot Boxes.” *USgamer.net*, USgamer. Accessed 20 April 2022. https://www.usgamer.net/articles/the-history-of-gaming-microtransactions-from-horse-armor-to-loot-boxes.

2019. “Skin Betting and Video Games: What Are They and How Does It Work.” *Videogames.org.au*. Accessed 4 May 2022. https://www.videogames.org.au/skin-betting/.

2022. “Is Fortnite Dying? How Many People Play Fortnite in 2022?” *TechaCake*. Accessed 25 April 2022. https://techacake.com/is-fortnite-dying/.

Crowdfunding

Overview

The word crowdfunding is defined as "the practice of funding a project or venture by raising many small amounts of money from a large amount of people, typically via the internet" (Prive 2012). Although this concept long predates the rise of the internet, online crowdfunding middlemen such as Kickstarter, Indiegogo, and RocketHub have established an entirely new form of industry, in which the consumer can act as an investor. Kickstarter was launched nine years ago in 2009 with a mission statement to "help bring creative projects to life." The website acts as a middle man between entrepreneurs, seeking out funding for a new creative project, and consumers, often presented incentivized reason to invest in said project. The Kickstarter website boasts a total of over four billion total dollars pledged to Kickstarter projects, with over one hundred fifty thousand successfully funded projects (Kickstarter 2018).

Crowdfunding has found immense success through subverting the traditional roles of producer and consumer as pertinent to the development new products and services. While distinctions between these two traditional roles are often blurred through this process, crowdfunding has its own intricate framework in which, all players act in distinct ways. First, there are "subjects who propose ideas or projects to be funded, wanting to use crowdfunding to get direct access to the market and to gather financial support from truly interested supporters" (Ordanini 2011). Secondly, there are those who decide to financially support these projects, bearing a risk and expecting a certain payoff. These players once acted through mere consumption, presented a decision to purchase a newly produced item. Now, they take an active role in the creation and dissemination of a project they deem most promising or interesting. Lastly, a third player is the crowdfunding organization, such as Kickstarter, which "brings together those who want to deliver the new initiatives using crowdfunding mechanisms and those who may wish to support such initiatives through their investment efforts" (Ordanini 2011). Through providing a service in which anyone can easily invest in a creative project, companies such as Kickstarter and Indiegogo have brought a novel funding mechanism to the industry of entrepreneurship. In this process, these companies have challenged and subverted old practices regarding investment, entrepreneurship, and the two-part producer consumer relationship.

Reshaping the Industry

The advent of communally funded projects holds the potential to fundamentally reshape the video game industry, removing long standing barriers of entry from the process of developing and releasing a game. As it stands today, the video game industry remains an oligopolistic business, "determined by the asymmetry of the different actors in the value chain: creators of consoles, publishers, and developers among others" (Planells 2017). Companies such as Nintendo, Sony, and Microsoft, each vertically integrated to control every aspect from game development to game distribution, fund their own projects with total freedom. Smaller development studios, however, seek both funding and distribution of video games from established publishers (Planells 2017). Through this process, developers are often forced to sacrifice their agency in creativity to meet the requirements of publishers if they seek to have adequate funding and distribution for their games. In this way, the game industry has a two-part

filter when developing a game: “the approval of gaming platforms in relation to the typical contents and the conditions set by the publisher to financially support the creation of the product” (Planells 2017). When all of these barriers to entry are involved in the game development and distribution process, less risks are taken creatively, with greater focus placed on simply creating products which can sell. As the process of crowdfunding ultimately subverts the need for investment from a publisher, many indie developers have utilized this alternative funding mechanism to bring their ideas to life.

Broken Age

In 2012, Tim Schafer, owner of the video games studio Double Fine, sought to obtain funding from a publisher for a classic point-and-click graphic adventure. When repeatedly turned by potential publishers, Schafer made the decision to crowdfund the game through Kickstarter, setting a financial goal of $400,000 for the entire project. The Kickstarter page displayed concept art for the game, video interviews with head developer Tim Schafer, and a series of increasingly priced pledgeship options, offering everything from the $15 for game itself, to $5,000 for a lunch with its developers. Within a mere eight hours of opening the page, Schafer found his project had already met its initial $400,000 goal. Then, a month after launching the Kickstarter, Double Fine had reached over eighty-seven thousand backers, with a total of US$3,336,371 (Planells 2017). At first, through the success of this campaign, it seemed as if the well-established production model of the video game industry had been entirely turned on its head, allowing a small developer to create and release a video game without the help of a publishing company. While the video game, eventually named Broken Age and released in January of 2014, received criticism for its various delays and difficulties throughout its production process (Gilbert 2013), these trials further accentuate the element of risk and reward involved in crowdfunded projects.

Beyond the story of Tim Schafer and his success in crowdfunding Broken Age lies a narrative regarding the decentralization of an asymmetrical industry, and the development of the gamer from passive buyer to active investor. Barriers of entry in developing video games disappear in the context of crowdfunding, as small developers no longer need to pass through strict requirements in order to secure funding from a video game publisher. When securing funds from a large amount of people, however, there are often more risks involved. Instead of being wholly accountable to one game publishing studio, developers are expected to fulfill every promise made to each individual investor. As was the case with Schafer’s Broken Age, crowdfunding efforts often exceed their intended goal, and with this, developers are expected return a product worthy of their funding. Schafer initially struggled to successfully produce a three million dollar product, explaining he had simply “designed too much game” (Gilbert 2013), feeling overwhelmed by the pressure of having over ninety thousand unique investors. In the end, however, he was able to return a product which pleased both consumers and contributors alike. While there remains great risk involved in the process of crowdfunding video games, there also lies a view at a possible future for the video game industry, in which games are developed and funded out of passion, rather than through a desire to simply acquire capital.

-A.H., Fall 2018

References

Gilbert, Ben. "Broken Promise: Double Fine's 'Broken Age' Kickstarter Mess." Engadget. July 14, 2016. https://www.engadget.com/2013/07/03/double-fine-kickstarter-debacle/.

Kickstarter. "Stats." Kickstarter. https://www.kickstarter.com/help/stats.

Ordanini, Andrea, Lucia Miceli, Marta Pizzetti, and A. Parasuraman. "Crowd-funding: Transforming Customers into Investors through Innovative Service Platforms." Journal of Service Management 22, no. 4 (2011): 443-70. doi:10.1108/09564231111155079.

Planells, Antonio José. "Video Games and the Crowdfunding Ideology: From the Gamer-Buyer to the Prosumer-Investor." *Journal of Consumer Culture* 17, no. 3 (November 2017): 620–38.

Prive, Tanya. "What Is Crowdfunding And How Does It Benefit The Economy." Forbes. March 25, 2016. https://www.forbes.com/sites/tanyaprive/2012/11/27/what-is-crowdfunding-and-how-does-it-benefit-the-economy/#12a752cabe63.

Devolver Digital

Overview

Devolver Digital, Inc. is a publicly-traded video game publisher that specializes in bringing independent (indie) video games to market. Headquartered in Austin, Texas, Devolver Digital (DEVO) is traded on AIM, a sub-market of the London Stock Exchange, with its initial public offering valued at $950 million in November of 2021 (Batchelor 2021). Some of Devolver Digital's most notable releases are 2012's Hotline Miami, 2016's Enter the Gungeon, and 2020's Fall Guys: Ultimate Knockout. Its games have seen both commercial and critical success, with Fall Guys generating unprecedented profits and 2021's Loop Hero being nominated for Best Indie Game at 2021's The Game Awards (Reeves 2021). 2020 was Devolver Digital's most fiscally successful year yet, with a normalized revenue of $71.1 million excluding Fall Guys's $150.5 million (Devolver Digital 2021, 40). Devolver Digital's core philosophy includes an emphasis on its developers and a mockery of monetization trends in the video game industry.

Founding and Business Strategy

Devolver Digital was founded in 2009 by Harry Miller, Rick Stults, Mike Wilson, Graeme Struthers, and Nigel Lowrie. Miller, Stults, and Wilson had previously worked together in the video game publishing space: first to launch the publisher Gather of Developers, or G.O.D. Games, in 1998, and then more recently to found publisher Gamecock Media Group (Devolver Digital 2021, 25). The trio's two video game publishing companies prior to Devolver Digital ended up being sold to Take-Two Interactive and SouthPeak Games, respectively. Having a history of creating developer-oriented publishing brands, the founders looked at trends in digital distribution as the key spark for Devolver Digital. Devolver Digital's founders "established Devolver as a digital-first publisher" for two main reasons: to cut down on manufacturing and distribution costs, and because digital distribution is rapidly overtaking physical distribution as the predominant method that customers purchase games (Devolver Digital 2021, 27). This coincides with broader industry standards, as most indie games get released exclusively digitally; however, Devolver Digital has released some physical copies of their more successful games, usually as limited-time offers.

Devolver Digital's partnerships are vital to its success. Being "developer-first" at its core, Devolver Digital claims "many of the Group's partner development studios have not released a title with another publisher since their first release with Devolver" (Devolver Digital 2021, 34). This isn't achieved by coercion, but rather by mutual respect between Devolver Digital and its developers. Devolver Digital lets developers retain intellectual property rights which bolsters many indie developers' desire to work with Devolver Digital to release their games. Devolver Digital claims that it spends relatively little on acquiring the rights to games, since "trusted partners return to Devolver with their new ideas, and IP owners have confidence in Devolver to

deliver a high-quality game" (Devolver Digital 2021, 34). The strength of the publisher's connections aren't just limited to development studios; Devolver Digital also has leveraged its relationships with overseas firms to expand its audience. Specifically interested in the East Asian market, the company "has built strong relationships with partners in the region, including BiliBili, Tencent and NetEase, with the latter becoming an investor in the Company" (Devolver Digital 2021, 37).

Published Games

Devolver Digital is one of the most prolific indie publishers, with a "back catalogue of approximately 90 titles" (Devolver Digital 2021, 26). Many of Devolver Digital's published games tend to be fairly retro in style, with pixel art graphics and arcade gameplay. The publisher believes this aesthetic works to "provide an evergreen quality" to many of their games, rather than pursuing "high visual fidelity, in contrast to big budget AAA titles" (Devolver Digital 2021, 31). Devolver Digital's self-proclaimed "breakout hit" was *Hotline Miami*, developed by Dennaton Games, for PC in October 2012 (Devolver Digital 2019, 26). *Hotline Miami* is a 2D shooter inspired by the 2011 arthouse film *Drive* (Matulef 2012). The game has gone on to sell over 1.5 million copies and has spawned a sequel which was released in 2015 (Futter 2015).

Devolver Digital prides itself on the long tail of its releases, despite rejecting common methods of achieving such a phenomenon, such as lootboxes and microtransactions. The company publishes five multi-title franchises, which include the aforementioned *Hotline Miami*, as well as *Serious Sam*, *Shadow Warrior*, *Reigns*, and *Enter the Gungeon*. Speaking of the latter, Devolver Digital has revealed that "*Enter the Gungeon*, which was released in May 2016, generated 70 per cent. of its total cumulative revenue from 2018 to 2020" (Devolver Digital 2021, 36). Devolver Digital attributes much of this to positive critical response, as the publisher boasts about the fact that the company "has attained a Metacritic rating of 75 over its entire lifetime" (Devolver Digital 2021, 36).

In August 2020, Devolver Digital published *Fall Guys: Ultimate Knockout*, developed by Mediatonic, for PC and Playstation 4. Unlike some of Devolver Digital's more retro titles, *Fall Guys* has a more cartoonish art style and emulates more modern genres. The game is a 3D battle royale in which players compete as contestants in a wacky game show akin to *Takeshi's Castle* and *It's a Knockout* (Sheridan 2020). *Fall Guys* was one of the Playstation Plus free games during the month it came out, meaning anyone who subscribed to Playstation's online subscription could download the game for free. This, in tandem with the game's virality on Twitch, greatly bolstered *Fall Guys*'s install base. *Fall Guys* was an overnight sensation on game-streaming platform Twitch, where the game peaked at 709,000 concurrent viewers during its first month released (TwitchTracker 2021). This resulted in *Fall Guys* quickly becoming Devolver Digital's most commercially successful game, garnering $150.5 million by the end of

2020 and leading to developer Mediatonic's acquisition by Epic Games in March 2021 (Devolver Digital 2021, 26).

Marketing Strategy

In recent years, Devolver Digital has employed a cynical, satirical marketing style, embracing the anti-establishment nature of many of its indie developers. Since 2017, Devolver Digital has hosted a virtual press conference at the Electronic Entertainment Expo (E3). From 2017 to 2019, the press conference was called Big Fancy Press Conference; in 2020 it was rebranded to Devolver Direct, and in 2021 it was called Devolver MaxPass+ Showcase. The press conference always employs a darkly comedic tone, with jokes ranging from "a new payment method that people can use to buy games" where "all you have to do is throw dollar bills at an outdated computer and that payment will be reflected in the game," to the host's head literally blowing up on stage (Alexander 2017). During Big Fancy Press Conference 2018, Devolver Digital released Lootbox Coin on its online store. Lootbox Coin was a physical token that was not a real currency and served no function other than to satirize the state of monetization in many AAA games and cryptocurrencies. The coin's price would fluctuate randomly, initially costing around $150 and peaking at $15,000 in December 2018 (Jarrard 2018). The publisher's press conferences and everything related to them are a good indication of Devolver Digital's core philosophies and audience. Devolver Digital's games are silly, punky, and different, and the publisher has been able to build a brand around such adjectives to deliver an indie game experience unlike any other.

-WD, Fall 2021

References

Alexander, Julia. 2017. "Devolver Digital's press conference was the best part of E3 that almost no one watched." Polygon, June 12, 2017. https://www.polygon.com/e3/2017/6/12/15781298/devolver-digital-e3-press-conference

Batchelor, James. 2021. "Devolver Digital valued at $950m as it floats on London Stock Exchange." Gamesindustry.biz, November 4, 2021. https://www.gamesindustry.biz/articles/2021-11-04-devolver-digital-valued-at-usd950m-as-it-floats-on-london-stock-exchange

Devolver Digital. 2021. "Admission Document November 2021." Devolver Digital, October 29, 2021. https://investors.devolverdigital.com/files/downloads-and-publications/Admission-Document-Devolver-Digital-Inc.pdf

Futter, Mike. 2015. "The Story Behind Hotline Miami Is One Of No Pants And Countless Deaths." Game Informer, May 7, 2015. gameinformer.com/b/news/archive/2015/05/07/the-story-behind-hotline-miami-is-one-of-no-pants-and-countless-deaths.aspx

Jarrard, Chris. 2018. "Devolver Digital's Lootbox Coin is back on the market topping all crypto valuations." Shack News, December 3, 2018. https://www.shacknews.com/article/108809/devolver-digitals-lootbox-coin-is-back-on-the-market-topping-all-crypto-valuations

Matulef, Jeffrey. 2012. “The creators of Hotline Miami on inspiration, storytelling and upcoming DLC.” Eurogamer, November 16, 2012. https://www.eurogamer.net/articles/2012-11-10-the-creators-of-hotline-miami-on-inspiration-storytelling-and-upcoming-dlc\
Reeves, Brianna. 2021. “Nintendo Switch Gets One Of 2021's Best Indies With Loop Hero Release.” Screenrant, November 18, 2021. https://screenrant.com/loop-hero-nintendo-switch-release-december-9/

Sheridan, Connor. 2020. “Fall Guys devs talk goofy game show inspiration and do their own obstacle course.” GamesRadar+, August 3, 2020. https://www.gamesradar.com/fall-guys-devs-talk-goofy-game-show-inspiration-and-do-their-own-obstacle-course/

TwitchTracker. 2021. “Fall Guys: Ultimate Knockout.” TwitchTracker, December 14, 2021. https://twitchtracker.com/games/512980

Digital Rights Management

Overview
Digital Rights Management (DRM) refers to "any access-control technology used by manufacturers, publishers, and copyright holders to limit the usage of digital services or information" (EC Council 2018). It is believed to be a crucial way for intellectual property (IP) holders to secure monetization for their digital products, particularly in an age of high-speed internet, concerns of internet piracy, and desires for mass distribution.

DRM Models
As the name suggests, DRM practices apply exclusively to digital mediums and goods. There is no one particular way to secure rights but rather an array of practices, all to varying degrees of effectiveness.

Among all digital software, the most simplistic of DRM comes in the form of product keys. These require the user's input of an alphanumeric combination when prompted by the software in order to initiate or continue using the software. As a result, the user's ability to engage with the product relies on the availability of a product key. PC-based video games sold through physical mediums (CD-ROMs, DVD, Blu-Ray, etc.) include a single product key with the purchase, thus limiting the number of devices the software can be installed on to one.

Propelled by relative ubiquity of the internet and popularity of competitive online video games, various platforms have instituted systems of persistent online authentication. Colloquially referred to as "Always-on DRM," these systems require users to have a constant internet connection with a game's servers to ensure repeated verification and proof-of-purchase to a specific account. Under such systems, the user's ability to purchase and engage with the product relies on the availability of an internet connection. Since the purchases are tied to a single account, the software can be installed on multiple devices so long as only one device is accessing the software's services at a time. This method of DRM works particularly well for games with a component of online multiplayer play, where the user is required to have an internet connection to engage in play. Video game companies that publish the most popular multiplayer games typically have their own proprietary platforms to ensure DRM – most notably, Blizzard's Battle.net, EA's Origin, Ubisoft's UPlay, and Valve's Steam.

Cybersecurity companies have also taken notice of the need for DRM. Companies like Austrian-based Denuvo have created proprietary software that "continuously encrypts and decrypts itself so that it is impossible to crack" (Kalra 2014), famously stumping "3DM, one of the world's most popular cracking groups" (Klepek 2018). DRM software like the Denuvo Anti-Tamper allows users to play offline, install the software on multiple devices, and ensures a heightened level of security, but comes with a hefty price tag, charging companies upwards of "€100,000" for each of their popular titles (Goebl 2016).

DRM Today
The implementation of DRM practices has been particularly effective at securing monetization in regions with high levels internet piracy. As early as 2012, Ubisoft CEO Yves Guillemot claimed

that there was a "93-95 per cent piracy rate" on PC platforms, calling for online free-to-play (F2P) games with in-game purchases to "gain revenue [and] help brands last longer" (Pearson 2012).

In the years since then, persistent online authentication has been the status quo of the gaming industry and DRM has directly enabled the rise of F2P, subscription-based, and service-based video games. Guilletmot's sentiment was clearly echoed in Asian markets and particularly in China, where currently the most popular games are all F2P (Gardner 2018) and revenue from video games exceeds any other country in the world (Newzoo 2018).

Essential to DRM's success is a shift in the idea of video game ownership. Each method of DRM comes with some form of licensing agreement. This practice is common with business-based software like Microsoft Office: the user does not own the product, but rather purchases a license to use that product and engage in the experiences therein. This is distinctive from physical distribution, as the user no longer purchases a good that has resale value, but a license associated with a specific account. In effect, such systems disincentivize users from deleting their accounts and encourage consistent play.

Through DRM, gaming companies have the ability to create artificial infrastructures for their users that ensures monetization at the time of purchase and through the product's life span. Beyond Asian markets, the effectiveness at securing monetization that DRM provides is clear: since releasing their *Origin* digital distribution platform in 2011, EA's stock price has increased tenfold (NASDAQ 2018).

Making DRM Possible

The introduction of DRM, largely spearheaded by the music and movie industries, was a natural consequence of the relative antiquity of the *Copyright Act of 1976*, which was relatively ill-equipped to deal with the mass popularity of the internet. Many early technological and litigative attempts at DRM were done so with the goal of self-preservation, fearing that the popularization of peer-to-peer (P2P) sharing platforms such as Napster, LimeWire, and BitTorrent would lead to a decline in revenue. As a result, lawmakers wrote the 1998 *Digital Millennium Copyright Act* (DMCA), criminalizing the "circumvention of technological measures used to protect copyrighted works" (DMCA 1998). In effect, these two acts set down the framework for contemporary internet-based DRM and formalized DRM practices within the law.

Without subsequent legislation, it was up to publishers of digital content to implement their own DRM practices and manage their users. Concurrently, the mass adoption of the internet and transition from physical to digital goods gave publishers both challenges and opportunities in implementing DRM systems. Many gamers approached DRM with apprehension, notably in 2004, when Valve required users to have both an internet connection and their distribution platform in order to play *Half-Life 2* (Colwill 2017). Steam's effectiveness was immediately apparent. No more than eight days after the game's release, Valve suspended the accounts of nearly 20,000 Steam users who attempted "to access *Half-Life 2* without purchasing it" (Thorsen 2004). Over time, as DRM practices became more common and other distribution platforms proliferated, gamers became more receptive. By using the principles of DRM, the digital

distribution platform Steam has since reached a “near monopoly on PC game sales” (Colwill 2017).

Through 1976 and 1998, it was clear that the video game industry was developing. Since then, video games have become a global industry, encapsulating a “total consumer spend $36 billion in 2017” (ESA 2018). Video game companies have a large stake in the continuation of DRM, and the industry’s DRM models are the standard for copy protection in the internet age.

DRM appears to be an ongoing fixture in contemporary gaming. The models that DRM IP holders use may certainly change over time and with additional legislation, but DRM is nevertheless viewed as an essential component to securing monetization in a digital age.

References

"China Games Market 2018." Newzoo. August 3, 2018. Accessed December 02, 2018. https://newzoo.com/insights/infographics/china-games-market-2018/.

Colwill, Tim. "Valve Is Not Your Friend, and Steam Is Not Healthy for Gaming." Polygon. May 16, 2017. Accessed December 02, 2018. https://www.polygon.com/2017/5/16/15622366/valve-gabe-newell-sales-origin-destructive.

EC-Council. "Computer Forensics: Investigating Network Intrusions and Cyber Crime, Vol. 4." Google Books. Accessed December 05, 2018. https://books.google.com/books/about/Computer_Forensics_Investigating_Network.html?id=0rVfRwcIPYgC.

"Essential Facts About the Computer and Video Game Industry." The Entertainment Software Association. Accessed December 02, 2018. http://www.theesa.com/about-esa/essential-facts-computer-video-game-industry/.

Gardner, Will. "Top 7 Video Games in China." The World of Chinese. June 7, 2017. Accessed December 2, 2018. https://www.theworldofchinese.com/2017/06/top-7-video-games-in-china/.

Goebl, Thomas. "Conversation with a Denuvo Employee." Reddit. 2016. Accessed December 02, 2018. https://www.reddit.com/r/CrackStatus/comments/4mtb46/conversation_with_a_denuvo_employee/.

"Historical Stock Prices." NASDAQ.com. December 2, 2018. Accessed December 02, 2018. https://www.nasdaq.com/symbol/ea/historical.

Kalra, Karan. "How The New DRM Denuvo Might Be Damaging Your SSD." AsidCast.com. November 18, 2014. Accessed December 02, 2018. https://web.archive.org/web/20150119041502/http://asidcast.com/index.php/2014/11/new-drm-denuvo-might-damaging-ssd.

Klepek, Patrick. "The Anti-Piracy Tech That's Giving Hackers Fits." Kotaku. February 17, 2016. Accessed December 02, 2018. https://kotaku.com/the-anti-piracy-tech-thats-tearing-video-game-hackers-a-1759518600.

Pearson, Dan. "Guillemot: As Many PC Players Pay for F2P as Boxed Product." GamesIndustry.biz. August 22, 2012. Accessed December 06, 2018. https://www.gamesindustry.biz/articles/2012-08-22-guillemot-as-many-pc-players-pay-for-f2p-as-boxed-product.

"THE DIGITAL MILLENNIUM COPYRIGHT ACT OF 1998 U.S. Copyright Office Summary." Copyright.gov. Accessed December 02, 2018. https://www.copyright.gov/legislation/dmca.pdf.

Thorsen, Tor. "Valve Suspends 20,000 Steam Accounts." GameSpot. November 24, 2004. Accessed December 02, 2018. https://www.gamespot.com/articles/valve-suspends-20000-steam-accounts/1100-6113916/.

Discord, Inc.

Overview

Discord, Inc. operates in the social and platform software industry, with key verticals including CloudTech & DevOps, Esports, Mobile, SaaS and TMT. Discord, Inc. remains a private company backed by venture capital funding, raising over USD 1.10B with a post valuation of USD14.70B as of 16th September 2021. Discord, Inc currently employs over 5,000 employees worldwide (Pitchbook 2022).

Discord, Inc. develops and operates the Discord platform, an instant messaging and digital distribution software designed to offer VoIP and texting services. Centered around providing communication services, the Discord platform allows users to communicate in private chat rooms or as part of communities in group chat rooms called "servers".

The Discord platform is currently available on Windows, macOS, Xbox, Playstation, Android, iOS, Linux, and web browsers. As of 2021, the Discord platform has over 150 million monthly active users across 19 million active servers with the majority of its users coming from the gaming community (Linkedin n.d.). Its core features remain free of charge, monetizing through its 'Discord Nitro' subscription packages.

Early History and Development

The development of Discord, Inc. has roots in the earlier projects of co-founders Jason Citron and Stan Vishnevskiy. In 2009, Citron founded OpenFeint, a social platform for mobile games which he describes as "essentially like Xbox Live for iPhones" (Pierce 2020). OpenFeint was later sold to Japanese game maker GREE in 2011 for $104 million (Viktor 2022).

Following the sale of OpenFeint, Citron founded Phoenix Guild, Inc. in 2012, later renamed Hammer & Chisel, Inc. in 2013. Operating as a gaming studio, Vishnevskiy joined Hammer & Chisel, Inc. in 2013 and in 2014, the studio released its flagship game, Fates Forever. The game was similar to League of Legends and featured voice and text communication functions (Pierce 2020), a key feature we see today on the Discord platform.

While Teamspeak and Skype were some of the more popular communication platforms utilized by gamers at the time, these platforms often had problems with server capacity, reliability, security, latency and user-friendliness. Additionally, a monthly fee was often required (Fiyerro 2021). Sensing a business opportunity, Hammer & Chisel, Inc. pivoted the business in 2015 and renamed itself Discord, Inc., creating a company focused solely on creating communication tools for gamers. Its platform, Discord, aimed to offer superior performance and easy usability, for free.

Initial Financing and Release

Prior to the development of the Discord platform, Hammer & Chisel, Inc. (as it was formerly known) had secured Series A funding and Series B funding worth USD 8.2M and USD 7M in 2013 and 2015 from major investors including WarnerMedia Investments, Tencent Holdings and YouWeb Incubator. The Discord platform was developed using this funding and was officially released to the public in May 2015. A further USD 289M was raised between its Series C to F

with the capital injection of USD 150M from its Series F round used to support the launch of Discord, Inc.'s Game Store and to improve its core communications technologies (Pitchbook 2022).

Monetization

Discord, Inc.'s primary revenue comes from its Discord platform. While its core communication features remain free of charge and do not support ads, it monetizes through its "Discord Nitro" subscription package first released in January 2017. In October 2018, Discord, Inc. expanded its monetization offerings, releasing the Discord Game Store and offering two tiers of subscription packages. At a monthly subscription fee of USD 4.99, "Discord Nitro Classic" offered users additional features such as access to an animated avatar, use of custom emojis, higher file upload limits and higher screen share resolutions. For USD 9.99, "Discord Nitro" included all the features of "Discord Nitro Classic" with the addition of access to free games on the Discord Game Store (CBInsights 2021).

Strategic Acquisitions

To support the growth and expansion of its platform, Discord, Inc. has made numerous acquisitions over the years. Using the capital injection from its Series F financing round, in 2018, Discord, Inc. acquired Blitz Esports, a gaming companion app maker, for an undisclosed fee. Prior to its acquisition, Blitz Esports was known for its League of Legends companion app which was used in 65 million matches in a period of only six months (Isak 2018). According to the Blitz Esports team, this acquisition was made to help Discord, Inc. support the expansion of its Nitro subscription service and the release of its Game Store (Stewart 2018). However, in March 2019, Discord, Inc. announced that it would be discontinuing the Game Store due to low user uptake.

In December 2020, Discord, Inc. successfully raised USD 100.05M from its late-stage Series H financing round. In its deal disclosure, Discord, Inc. announced that it would be using the funds to improve and develop features on its platform for both free and paid subscribers (Pitchbook 2022). In 2021, we saw a series of acquisitions by Discord, Inc.

In 2021, Discord, Inc. acquired Ubiquity6, an augmented reality startup for an undisclosed fee. Ubiquity6 attempts at finding mass adoption in the mobile augmented reality (AR) market were unsuccessful and in 2020, pivoted from AR to build a desktop platform called Backyard that allowed users to play simple online party games together remotely (Matney 2021). While the strategic purpose of the acquisition has not been disclosed, it was announced that Backyard would be discontinued and incorporated into the Discord platform.

Also in 2021, Discord, Inc. announced the acquisition of Sentropy, a company that produces AI-powered software to detect and remove online harassment and hate (Hatmaker 2021). In recent years, Discord, Inc. has faced accusations of harboring violent far-right, white supremacist and neo-Naiz groups. As the Discord platform grows into a mainstream social network reaching a wide community of users outside its core gamer base, Discord, Inc. has found itself increasingly challenged to moderate content on its platform. Discord, Inc. currently relies heavily on a human-based moderation approach and has a Trust and Safety team comprising 15% of its workforce (Hatmaker 2021). Integrating Sentropy's AI moderation technologies into its content moderation strategy is expected to build a safer place for its users.

Future of Discord, Inc.

Through its acquisitions, Discord, Inc. has steadily invested in new features and tools to improve its Discord platform. However, not all of Discord, Inc.'s initiatives have been successful as seen in the closure of its Discord Game Store.

As a private company, detailed information about its finances and strategic roadmap also remains unclear. However, with an increasingly wide community of new users outside its core gamer base joining the platform, no less accelerated by the COVID-19 pandemic, Discord, Inc. in 2020 announced a rebranding away from a dedicated communication platform for gamers. This shift towards greater inclusivity for all of its users is most prominently reflected in the company's new tagline: "Your place to talk" (Bonifacic 2020). To make its platform friendlier and easier to use, Discord, Inc. has announced that it plans to improve the new user onboarding experience, increase capacity for voice and video chat, and continue to invest in reliability and performance (Chin 2020). Fewer references to gaming on its platform are expected and more would be done to moderate harmful content.

Despite impressive growth, Discord, Inc. remains unprofitable and the key to its continued success is to find more avenues of monetization. Nonetheless, Discord, Inc.'s future remains bright and the company turned down a USD 12B acquisition offer by Microsoft in April 2021 (Roof, 2021). Discord, Inc. looks set to chart its own path of independence and in its most recent late-stage funding round, raised an undisclosed amount from AIkido Pharma on May 4, 2022 (Pitchbook 2022). Discord, Inc. has reported that the funds would be used to maximize opportunities for liquidity and monetization events for shareholders, and for a not-too-distant initial public offering (IPO).

- K.M. Spring 2022

References

Bonifacic, Igor. "Discord Is Rebranding to Shift Away from Gaming." Engadget, July 10, 2020. https://www.engadget.com/discord-rebranding-151953314.html.

CB Insights. "How Community Chat Mega-Platform Discord Makes Money - without Ad Revenue." CB Insights Research. CB Insights, October 21, 2021. https://www.cbinsights.com/research/report/how-discord-makes-money/#money.

Chin, Monica. "Discord Raises $100 Million and Plans to Move beyond Gaming." The Verge. The Verge, June 30, 2020. https://www.theverge.com/2020/6/30/21308194/discord-gaming-users-safety-center-video-voice-chat.

"Discord Company Profile: Valuation & Investors." PitchBook, May 6, 2022. https://pitchbook.com/profiles/company/54805-51#overview.

"Discord - Linkedin." Accessed February 22, 2022. https://www.linkedin.com/company/discord.

Fiyerro, Jacklyn. “How Does Discord Make Money? Business Model Explained.” oolipo, January 5, 2022. https://oolipo.com/discord-money-business-model/.

Hatmaker, Taylor. “Discord Buys Sentropy, Which Makes AI Software That Fights Online Harassment.” TechCrunch. TechCrunch, July 13, 2021. https://techcrunch.com/2021/07/13/discord-buys-sentropy/.

Isak, Christopher. “Discord Acquires Blitz Esports to Grab Companion App.” TechAcute, November 12, 2018. https://techacute.com/discord-acquires-blitz-esports/.

Matney, Lucas. “Discord Acquires Augmented Reality Startup ubiquity6.” TechCrunch. TechCrunch, June 28, 2021. https://techcrunch.com/2021/06/28/discord-acquires-augmented-reality-startup-ubiquity6/.

Pierce, David. “How Discord (Somewhat Accidentally) Invented the Future of the Internet.” Protocol. Protocol – The people, power and politics of tech, October 29, 2020. https://www.protocol.com/discord.

Roof, Katie, and Dina Bass. “Chat App Discord Ends Takeover Talks With Microsoft.” Bloomberg.com. Bloomberg, April 20, 2021.

https://www.bloomberg.com/news/articles/2021-04-20/chat-app-discord-is-said-to-end-takeover-talks-with-microsoft.

Stewart, Jack. “Blitz Esports Closes Content Platform after Being Acquired by Discord – Archive - The Esports Observer.” The Esports Observer, November 8, 2018.

https://archive.esportsobserver.com/blitz-esports-closes-content-platform-acquired-discord/.

Viktor. “The Discord Business Model – How Does Discord Make Money?” productmint, January 18, 2022. https://productmint.com/the-discord-business-model-how-does-discord-make-money/.

DouYu TV

Overview

DouYu TV is a Chinese video game streaming platform and a pioneer in the Chinese eSports value chain. The company operates its streaming platform on PC through www.douyu.com and mobile app. The platform provides gaming centric and entertainment live streaming, which allows users to have real time interactions with the content.

History

China's gaming market saw a huge growth starting in the early 2000s. In 2006, China overtook South Korea and became Asia's largest online gaming market (Kshetri, 2009). With the booming popularity of eSports in China, a large and fast-growing group of game enthusiasts emerged with increasing demand for immersive experience to watch skillful game play while socializing with each other on a real-time basis. The opportunity to interact and communicate with fellow gamers has also become a key motivation for Chinese gamers.

Within the context of the rising Chinese gaming market, DouYu TV started as a game live-streaming summit of ACFun. ACFun is an animation and cartoon sharing site that allows users to post real-time bullet comments. The business model allowed interactive user experience, which laid the foundation for DouYu's live-streaming and live-commenting functions. As DouYu TV's founder Chen Shaojie sees the rise of Twitch in the west, he repurposed ACFun to expand on game live-streaming features in 2012 (Grigorian, 2019). The gaming section of ACFun continues to grow due to China's huge market demand, which catalyzed the opportunity for the gaming contents to become its independent business known as DouYu TV in 2014.

By the end of 2016, China had more than 730 million internet population with 344 million audience on live-streaming platforms in particular. In line with the user-base growth, the number of streamers in China has also boomed from 6 million in 2015 to 18 million in 2018 (SEC, 2019). The emergence of multiple platforms created an intensively competitive live-streaming market in China. Two unicorn live-streaming platforms in particular dominate the Chinese live-streaming market: DouYu TV and Huya. In the first half of 2018, 8 live-streaming platforms in China were estimated to raise $11.6 billion. Amongst the 8 platforms, DouYu TV and Huya accounted for nearly 70% of the total revenue (Zhuge, 2018).

DouYu TV Operations

DouYu TV's main webpage interface features a carousel of trending PC and mobile gaming content. The streaming section presents streaming content that are categorized by game, recommended video gaming content, and streamer popularity.

Live streaming accounts for 86.1% of DouYu TV's revenue, and advertisement revenue from brand and game publishers accounts for the remaining (SEC, 2019). DouYu TV primarily generates live streaming revenue through the established virtual gift-giving system. For each virtual gift transaction on the platform, DouYu TV would share a portion with the streamer who received the gift. In the system, users would top-up their DouYu accounts with real money

through Alipay, Wechat pay, or online banking, in exchange for DouYu's virtual currency YuChi. The exchange rate between YuChi and Chinese RMB is 1:1. Users could use YuChi to purchase a variety of virtual items with different labeled prices that are presented on each streamer's respective streaming interface (figure 1). Virtual items include but are not limited to virtual 'Magic Orb' (10 YuChi), virtual 'Airplane' (100 YuChi), and virtual 'Rocket' (500 YuChi).

Figure 1: Screen capture of DouYu TV virtual gift option section as of May 13, 2020

Interpersonal relationships on DouYu TV is enhance by the mechanisms of the virtual gift system. The gifting system serves as an expression of affection from viewers to show their appreciation for streamers. DouYu TV provides various incentives to stimulate virtual gift transactions. A weekly virtual gift contribution chart would be displayed on the side of each streamer's respective streaming interface that highlights top contributing users (figure 2). DouYu TV also features an embedded gamification system, in which purchasing virtual gifts would level up the user account level (Zhang et al., 2019). Processing from one level to the next enables additional user privileges, such as but not limited to special live-chat font/chat frame and special notifications to streamers once the user enters the streaming room.

Figure 2: Screen capture of DouYu weekly virtual gift contribution chart as of May 13, 2020

DouYu TV Features

Streamers in China are crucial assets to live-streaming platforms because they play a key role in attracting and retaining viewer traffic. DouYu TV recognizes their player-driven audiences and brings a deep pool of professional players of popular games in China to the platform. DouYu TV has signed with numerous professional players from League of Legends teams worldwide, including but not limited to League of Legends S9 World Champion Funplus Phoenix (FPX) and League of Legends S3/S5/S6 World Champion T1 Entertainment & Sports (Chen, 2020). Top eSports stars, such as Faker from T1 and Doinb from FPX, have helped DouYu TV to maintain its audience base, foster virtual gift transactions, and enhance skillful gaming content.

DouYu TV features a Yuba section that could be accessed either directly on https://yuba.douyu.com/homepage/main or through the DouYu TV home page. Yuba serves as a DouYu TV exclusive blog page. Streamers could post content such as but not limited to their recent streaming highlights, upcoming streaming schedule, prize raffle, and advertisements on Yuba. Viewers, on the other hand, could post their thoughts on gaming content, participate in prize raffles, and comment under streamer's Yuba post. Yuba allows users to establish a closer bond with their favorite streamers, which fulfills the Chinese audiences' need of obtaining immersive experience through the platform.

DouYu TV Today

DouYu TV remains as one of the top live-streaming platforms in China today. As of December 2018, DouYu TV has more than 6 million registered streamers and an average total daily time spent by active users of 24.2 million hours. By 2019, DouYu TV has 159.2 million average monthly active users (SEC, 2019). Increasing MAUs allowed advertisements on DouYu TV to be attractive for brand advertisers due to the larger user traffic and effective advertising method of having streamers endorse products during live streaming.

In 2018, Tencent seized the growing live-streaming opportunity and invested in both DouYu TV and Huya. Tencent invested $632M in DouYu TV and have since become the single largest shareholder of the company with 37.4% stake (Hayward, 2019). As DouYu TV is backed by Tencent and seeing revenue growth, the company filed for a U.S. initial public offering in 2019. By July 2019, DouYu TV had sold $775 million in stock in its U.S. IPO, making the company the largest Chinese IPO in the U.S. in 2019 (Hayward, 2019).

-C.D., Spring 2020

References

Andrew, Hayward. "DouYu Raises $775M in U.S. IPO, Tencent Still Largest Shareholder." *The Esports Observer*. July 17, 2019. Accessed May 12, 2020. https://esportsobserver.com/douyu-us-ipo-775m/

DouYu TV. Accessed May 13, 2020. https://www.douyu.com

DouYu TV Yuba. Accessed May 13, 2020. https://yuba.douyu.com/homepage/main

Greg, Grigorian. "Here is What You Need to Know About Douyu, Chinese Streaming Unicorn Eyeing US IPO". *Pandaily*. July 9, 2019. Accessed May 12, 2020. https://pandaily.com/here-is-what-you-need-to-know-about-douyu-chinese-streaming-unicorn-eyeing-us-ipo/

Hongyu, Chen. “LPL Spring Final Brings Commercial Value to China’s Capital, DouYu Signs Multiple Deals”. *The Esports Observer*. May 06, 2020. Accessed May 13, 2020. https://esportsobserver.com/china-esports-recap-may6-2020/

Nir, Kshetri. “The Evolution of the Chinese Online Gaming Industry”. *Journal of Technology Management in China*, Vol 4(2). 2009. Accessed May 12, 2020. https://libres.uncg.edu/ir/uncg/f/N_Kshetri_Evolution_2009.pdf

United States Securities and Exchange Commission. “DouYu International Holdings Limited”. Washington, D.C.: 2019. Accessed May 13, 2020. https://www.sec.gov/Archives/edgar/data/1762417/000104746919002447/a2238404zf-1.htm#dw77301_industry_overview

Xiaoxing Zhang, Yu Xiang & Lei Hao. “Vitual gifting on China’s live streaming platforms: hijacking the online gift economy”. *Chinese Journal of Communication*, Vol. 12. March 21, 2019. Accessed May 14, 2020. https://doi.org/10.1080/17544750.2019.1583260

Yue, Zhuge. “Video Consumption, Social Networking, and Influence”. *Communications of the ACM*, Vol. 61, No. 11. November 2018. Accessed May 12, 2020. https://cacm.acm.org/magazines/2018/11/232213-video-consumption-social-networking-and-influence/fulltext

Downloadable content (DLC)

Overview

Downloadable content, colloquially known as DLC, is a form of optional official game content that is supplemental to an existing game. DLC can be superficial additions to a base game, such as skins and in-game cosmetics; others can impact gameplay on a greater level, providing new characters, map expansions, items, quests, levels, and modes. These add-ons can be free or – most commonly – require players to pay. DLC has become standard in the gaming industry, to the point that add-ons are responsible for 60% of a game's revenue in 2022 (GameCentral 2022).

Conflicting definitions of DLC

There exist varying definitions of DLC, with some video game scholars/journalists coining it broadly as any supplemental content, including microtransactions or battle passes. Others provide a distinction between microtransactions, season/battle passes, expansion packs, etc. as varying iterations of DLC, tied to different periods and sectors within the gaming industry. Microtransactions in particular are seen as "a continuation of … DLC which is considered 'an emergent standard in gaming'"(Švelch 2017). This definition emphasizes the evolution of DLC through the years as it became more ubiquitous in the industry, from its initial form of an expansion pack to its current hyper-realized form of microtransactions and battle passes. In order to honor these distinctions, this entry will focus on the traditional definition of DLC as solely base game add-ons that are not intentionally built into the game's internal economy (thus excluding microtransactions and battle passes, though these will be addressed later as evolutions of DLC).

History

The origins of DLC can be found in the distribution strategy for *Total Annihilation*, a real-time strategy game developed by Cavedog Entertainment and published by Atari in 1997. *Total Annihilation* is widely regarded as the first game to introduce DLC to the gaming industry, with its developers releasing free post-release downloads, including *Total Annihilation: The Core Contingency*, an expansion pack that offered 2 new campaigns and 75 new battle units. Following *Total Annihilation*'s success, reinforced by its "trickle in" strategy of DLC, other companies such as Microsoft, SEGA, Sony, and Nintendo would begin producing post-release content for their games. For example, Ubisoft's *Just Dance* franchise (first released on the Nintendo Wii) would allow players to buy new songs and choreographies in an online shop. Later on, these individual purchases would be bundled into a subscription service called Just Dance Unlimited, introduced in 2016, which allowed players to access songs that were locked in the base game.

Economics of DLC

Before DLC, video games were largely most popular at release (or at public realization of the game) and gradually decreased in revenues following their one playership peak. With the advent

of DLC, however, video game companies could create multiple playership peaks for a single game as new content trickled out to its player base.

These resulting content cycles allowed video game companies to continuously earn revenue off of a game far from its initial release. Over the years, this source of refreshing earnings has become a crutch for companies as a way to renew or reinvigorate the life of a dead or dying game. A scholar observes about the console gaming industry (early on in the introduction of DLC): “the reason that many large video game corporations are increasingly reliant on the DLC business model is very simple; it fills a monetary hole … and the video game industry [is] looking to use these additional monetization of individual games as a way of ensuring consumers continue to pay for a game after they already own a physical disc” (Lizardi 2012).

As DLC developed, there also emerged a subcategory called the “zero-day” or “day-one” DLC, content that is available to download on the same day a game is released. When games were largely sold physically, there was also “on-disk” DLC, also a form of zero-day DLC, which required consumers to buy an in-game code in order to access content hidden in the physical copy.

DLC has also created a shift in the working environment within the game industry. Post-game release layoffs used to be common within video game companies; now, “developers who created all the game’s content stay employed crafting DLC … [companies are] able to keep developers employed and generating additional revenue” (Levy 2015).

Controversy

Though DLC has a tangible economic benefit for video game companies, it has been a source of controversy amidst the gaming community. Some scholars describe the DLC economic model as predatory towards consumers because it creates a cycle of “perpetual commodification” benefitting the video game industry but hurting the consumer, who is compelled to continuously pay for essentially the same – or similar – product through multiple small purchases. These add-ons, when marketed as smaller purchases, may not appear as a great price to a consumer. However, in the end, the consumer may have paid far more for a game than they ever would for a base game. There is also potential social pressure surrounding DLC, where add-ons that encourage multiplayer use (such as locked maps in FPS games) can result in players buying the DLC simply because their peers have.

Some players feel that DLC is a blatant form of monetary gain on the end of video game companies and that the proliferation of DLC has resulted in watered down base games in order to further encourage fans to purchase DLC. Such sentiments have resulted in many DLC-related controversies; famously, in 2012, BioWare’s *Mass Effect 3* sparked anger from fans when a hacker discovered that portions of the base game may have been taken out in order to create DLC. The resulting DLC was “over 600MB and [included] the mission itself, the cinematic flashback moments, the cinematic dialogue interactions … ‘everything that makes the adventure a cohesive experience’” (PCMag 2012). In the end, statistics proved that the DLC economic model was successful; 40% of players that purchased the base game also bought the DLC on the same day.

Evolution of DLC and the current economy

The industry view of DLC has shifted along with the mediums of gaming; where expansion packs and cinematics may have been the primary form of DLC in the past, many scholars argue the current video game industry is divorced from that mode. The present industry relies heavily on microtransactions, an evolution of DLC that is centered in a game's internal economy. Microtransactions are regarded as a more pervasive iteration that is potentially more predatory to consumers – certain subcategories of microtransactions, such as loot boxes, may encourage gambling as consumers are exposed to only the possibility of rewards. Additionally, "entrapment by microtransactions may occur because the costs are less salient, because these transactions are represented as virtual credits or credit card debt"(King 2018); in-game currency is often valued far less than regular currency or fictionalized to the point that players may not equate in-game purchases to real financial transactions.

The mobile gaming industry has become the top gaming medium (between mobile, console, and PC) due to its omnipresent in-game purchases (microtransactions), with 136 billion USD projected earnings in 2022 (Thomas 2022). Broadly, game industry revenue relies largely on microtransactions and DLC in general (in all of its evolutions and forms); leading revenue statistics from 2021 illustrate this, with 61% of Activision Blizzard's revenue generated through microtransactions (McKeand 2022).

-J.C., Fall 2022

References

Lizardi, Ryan. "DLC: Perpetual Commodification of the Video Game." *Democratic Communiqué* 25, no. 1 (2012). Accessed December 06, 2022. https://scholarworks.umass.edu/democratic-communique/vol25/iss1/3

Levy, Ethan. "How DLC Actually Helps Games." Kotaku, February 19, 2015. Accessed December 06, 2022. https://kotaku.com/how-dlc-actually-helps-games-1686831595.

Švelch, Jan. "Playing with and against microtransactions." In *The Evolution and Social Impact of Video Game Economics*, edited by Casey B. Hart, 101-119. Maryland: Lexington Books, 2020.

"BioWare Responds to Mass Effect 3 DLC Controversy." PCMAG, March 12, 2012. Accessed December 05, 2022. https://www.pcmag.com/archive/bioware-responds-to-mass-effect-3-dlc-controversy-295261.

King, Daniel L., Paul H. Delfabbro. "Predatory monetization schemes in video games (e.g. 'loot boxes') and internet gaming disorder." *Addiction*, 113: 1967-1969. Accessed December 05, 2022.

McKeand, Kirk. "61% Of Activision Blizzard's 2021 Revenue Was Earned via Microtransactions." USA Today. Gannett Satellite Information Network, February 8, 2022. Accessed December 06, 2022. https://ftw.usatoday.com/2022/02/activision-blizzard-2021-revenue-microtransactions.

GameCentral. "More Money Is Now Spent on DLC and Subscriptions than Video Games." Metro. Metro.co.uk, February 8, 2022. Accessed December 06, 2022. https://metro.co.uk/2022/02/08/more-money-is-now-spent-on-dlc-and-subscriptions-than-video-games-16071570/.

Thomas, Ian. "How Free-to-Play and in-Game Purchases Took over the Video Game Industry." CNBC. CNBC, October 6, 2022. Accessed December 05, 2022. https://www.cnbc.com/2022/10/06/how-free-to-play-and-in-game-purchases-took-over-video-games.html.

E3 (Electronic Entertainment Expo)

Overview

The Electronic Entertainment Expo, or more commonly referred to as E3, is a “premier event for computer and video games and related products” (ESA 2018). Organized by the Entertainment Software Association (ESA), E3 is held annually at Los Angeles Convention Center during June for 3 days. Said the be the biggest event of the year for the video game industry, E3 provides an opportunity for companies in the industry to showcase for video game software, hardware and new game tech innovations for the upcoming year (Watts 2019).

The Origin

The first E3 took place 25 years ago in May 11-13 1995 at the same venue as it takes place now in Los Angeles, California. However, before the concept of E3 was brought under the light, there was a show called the Consumer Electronics Show, or CES, held twice per year in Las Vegas or Chicago, showcasing the latest electronic innovation, including car alarms, refrigerators or telephones and many other household items. Not so much attention were given to the video game exhibitors, though, as CES seemingly marginalized the game companies by making them exhibit their products in tents off the main floor at the end of the pornography section. The unfair treatment against the video game industry has led to the advent of the Interactive Digital Software Association (IDSA), which later became the ESA. In 1994, IDSA announced plans to host their own expo dedicated only to the video game industry and by early 1995, the tradeshow was given a name --the Electronic Entertainment Expo, which soon gained support from most of the major game companies, with SEGA being the first and Nintendo not too long after (IGN 2013).

The debut show of E3 in took place in 1995 and was considered an enormous success, “attracting large numbers of visitors, fat profits, and massive media exposure”(Campbell 2019). Artists like Michael Jackson were said to have attended the Sony showcase, not to perform, but simply came to the party to play games. The total number of attendees on record was estimated to be more than 50,000 that year, causing unexpected significant traffic.

Rising Issues

In 1997 and 1998, the show was relocated to Atlanta, Georgia due to failure of negotiations with the former venue. In 1999, it was moved back to Los Angeles Convention Center (Varanini 2010). As the console war between the companies escalates, an increasing number of new consoles and games were being released with each year. The number of attendees also rose quickly. In 2006, more than 70,000 people attended E3 that year and the problem of overcrowding in exhibition spaces was finally out of hand with the unacceptable long lines and wait time (Parker 2016). The cost for game companies to exhibit at E3 also rose exponentially. Companies could spend up to $10 million building their booths to put on a good presentation and demo for the audience. A 600 square feet exhibition space - smallest offered at E3- costs $30,000, not including the booth itself nor any other necessary expenses (Conditt 2013). To

address the issues, ESA decided to reintroduce E3 in 2007 as an "invite-only media summit" taking place in hotel conference rooms for businesses and journalists only instead of large expo opened to the public. The scale of the showcase dropped down to only 5000 industry-related attendees. However, the decision soon faced backlash as the event lost its significance in being a celebratory convention for the gaming industry with elaborate booths and festive music. After merely one other year, E3 is back to being opened to a slightly wider audience in 2009, but with an attendance capped at 45,000 with an effort to manage the cost at the same time (Buckley 2013).

From 2009 on, the scale of E3 remained around 50,000 members. However, starting 2013, many major companies have chosen to showcase their new consoles and gadgets prior to the expo. While still hosting and exhibition at E3, both Sony and Microsoft have made announcements of their new products before the event in an effort to minimize competition with other companies (Buckley 2013). E3 itself also faces competition from "fan-focused expos" as well as other business conventions in the game industry. For example, BlizzCon, Blizzard's annual convention was attracting an increasing number of audience each year (Parker 2016).

Today

In 2017, 15000 tickets were reserved to be sold to the public for the first time, and attendance inevitably reached 68,000, triggering another wave of complaints for overcrowding. Online articles regarding negative comments towards E3 surged across the internet. To alleviate the problem, in 2018, "E3 is going to offer industry-only hours on two days of the show" (Brightman 2018). ESA reported 69,200 people attended E3 2018, along with 200 exhibitors showcasing 3,250 products, claiming it an enormous success (ESA 2018). However, in 2019, Sony was a noticeable absence from the list of participating companies, and for the first time since the advent of E3 25 years ago. "The world has changed but E3 hasn't necessarily changed with it," stated Layden, Sony's PlayStation head, addressing how accessibility of internet the decrease of physics trading and has made a trade show lose its significance since there is not a lot of "trading activity" (Watts 2019).

Impact on the Video Game Industry

The inauguration of E3 in 1995 marked a pivotal moment in the history of video game industry. It gave companies, either major corporations like Nintendo, or smaller indie companies a chance to showcase their product to an audience who are genuinely interested in the gaming industry, instead having to share an audience and space with the generic electronic venders like CES. It provided a platform for the early console war to take place in the 1990s, encouraging companies to compete with each other for more innovative ideas with lower prices. However, the competition does not benefit every company. SEGA, in 1995, under the pressure of Sony's PlayStation launch in September, began selling the Saturn console in May following the E3 conference, way ahead of the scheduled date in September. The market for Saturn hit a downturn following the debut of Nintendo 64 on E3 in 1996 before it could make its way up, leading to the inescapable fate of being discontinued just 3 years after it was launched (Varanini 2010).

Over the years, E3's role in bringing publishers, retailers and the press together when a new game or console is announced has weakened with the rise of popularity in digital distribution and mobile gaming. With the shift in the structure of the industry, E3 is slowly adapting to remain in the spotlight. In 2015, ESA planned to have more than 90 mobile gaming exhibitors to accommodate the skyrocketing trend of mobile gaming and 53 exhibitors showcasing virtual reality, another growing area of the game industry.

The gaming industry has changed substantially since the beginning of E3 25 years ago. Nevertheless it is still, at present, considered a greatly distinguished event for gamers and those working in the gaming industry for its prominent size and influential group of exhibitors.

-T.H., Fall 2019

References

Brightman, James. "E3 2018: ESA's Mike Gallagher Expects 'Biggest Impact Ever' At This Year's Show." GameDaily.biz. GameDaily.biz, June 8, 2018. https://gamedaily.biz/article/32/e3-esas-mike-gallagher-expects-biggest-impact-ever-at-this-years-show

Buckley, Sean. "Then There Were Three: Sony, Microsoft, Nintendo and the Evolution of the Electronic Entertainment Expo." Engadget, June 6, 13AD. https://www.engadget.com/2013/06/06/sony-microsoft-nintendo-and-the-evolution-of-the-electronic-entertainment-expo/

Campbell, Colin. "The Story of the First E3." Polygon. Polygon, June 7, 2019. https://www.polygon.com/features/2019/6/7/18653968/e3-history-1995-sega-saturn-nintendo-64-playstation-launch

Conditt, Jessica. "Breaking down the Cost of an E3 Booth." Engadget, July 14, 2016. https://www.engadget.com/2013/07/16/breaking-down-the-cost-of-an-e3-booth/

ESA. "69,200 Attendees Close Successful E3 2018." E3 Expo, June 14, 2018. https://www.e3expo.com/news/uncategorized/69200-attendees-close-successful-e3-2018

IGN. "A Brief History of Electronic Entertainment Expo - E3 Wiki Guide." IGN, June 7, 2013. https://www.ign.com/wikis/e3/A_Brief_History_of_Electronic_Entertainment_Expo

Parker, Laura. "E3, Fading Catnip for Video Gamers, Tries a New Approach." The New York Times. The New York Times, June 8, 2016. https://www.nytimes.com/2016/06/09/technology/personaltech/e3-fading-catnip-for-video-gamers-tries-a-new-approach.html

Sarkar, Samit. "PlayStation Is Skipping E3 2019." Polygon. Polygon, November 15, 2018. https://www.polygon.com/2018/11/15/18097443/e3-2019-sony-no-press-conference

Varanini, Giancarlo. "E3: Past, Present, and Future." GameSpot, June 9, 2010. https://www.gamespot.com/articles/e3-past-present-and-future/1100-6210423/

Watts, Steve. "E3 2019: Video Game Industry Readies for Major Annual Showcase." CBS News. CBS Interactive, June 11, 2019. https://www.cbsnews.com/news/e3-2019-video-game-industry-readies-for-major-annual-showcase/

EA Sports

Overview and History

EA Sports is a division of Electronic Arts (EA) that was founded in 1991 and develops and publishes sports games. However, its origin can be traced back even further, all the way back to 1983 and the release of *One on One*, a basketball game in which players duel it out against one other player. This game featured superstars Larry Bird and Julius Irving as the players and signified the beginning of one of EA sports' most powerful tools: using celebrities in the design and promotion stages of games (Flemming 2007). In 1988, EA released their next seed for EA Sports, *Touchdown Football*, in collaboration with Hall of Fame head coach and announcer John Madden. Both of these games, which were released before the founding of EA Sports, set the groundwork for the future sports division of EA.

EA Sports was originally called "EA Sports Network" (EASN) and was primarily used for marketing until their partnership with John Madden blew them into the mainstream. The first game that EA Sports released as their own division of EA was *NHL Hockey* in 1991, which was followed by four other titles in the next two years. Most EA Sports titles are developed in either the EA Vancouver or EA Tiburon studios (EA 2020). EA Vancouver was responsible for the *Need For Speed* franchise that quickly became a staple of their catalog. EA Sports' main competitor, especially for NBA games, is 2K sports (Robinson 2012). Since 1991, EA Sports has launched 31 franchises, five of which have released games in the past two years: *Madden, NBA Live, NHL, FIFA,* and *UFC.*

Franchises and Partnerships

EA Sports franchise games are generally released on a yearly basis, following the seasons of their sport (EA 2020). For example: *Madden* is released in the late summer every year in unison with the beginning of the NFL preseason. There are some exceptions to this trend, however, as a result of which licenses EA Sports owns. This is often the case with *FIFA* because of other soccer tournaments that take place on different schedules such as the World Cup (Connolly 2019). In cases like this, EA Sports has historically released games for each season and tournament. Their franchises have reached far and wide, covering sports from Cricket to Formula 1 Racing to College Sports. Additionally, they often create a franchise as a result of a partnership with a specific league (Santana 2019). Of their five active franchises, the most successful are *FIFA* and *Madden.* Most franchise games are sold for $59.99 and include online, offline, and season modes.

Partnerships are an instrumental part of EA Sports' business model. EA founder Trip Hawkins understood the influence that celebrities carried, as a result of *One on One,* and wanted to translate this into increased popularity for his games. Early partnerships included athletes, coaches, and broadcasters, and have since expanded to include leagues like the NFL and the Premier League. Early partners like John Madden gave EA Sports games an unprecedented authentic feel while adding selling power, hence the catch phrase "EA Sports, it's in the game". Today, EA sports employs cover athletes for these same reasons and partners with leagues to gain higher level access to their teams which results in a more detailed and nuanced gameplay

(Mai 2016). Additionally, they release multiple versions of each game to target different audiences. “Hall of Fame” editions feature older players while the yearly titles feature current stars.

Platforms

Ever since its creation in 1991, EA Sports has released their games on PC in addition to consoles. In 2009, things began to change - they began to take games off of PC platforms, starting with their larger titles like *Madden, NASCAR, and NBA Live*. Although never completely abandoned, EA Sports leadership backed off of PC platforms because of their declining popularity. Today, only two major games are released on PC: *Madden* and *FIFA* (EA 2020).

Hawkins and his team had to decide how they would release games. For Hawkins, this question was very simple - he would release them on whatever platform the public chose (whichever had enough users to justify the production of a game for their platform). EA as a whole committed primarily to the Sega Genesis and Super Nintendo Entertainment System (NES) before 1991 and, therefore, EA Sports had as well. EA Sports would continue to use the Genesis until roughly 1997 (Flemming 2007). During this time period they established a number of successful franchises including *NHL Hockey* and *NBA Live*.

Since then, EA Sports continues to adapt to the most popular platform. They next pivoted to Sony’s original PlayStation, the Sega Saturn, and the Nintendo 64, which were dismissed in the early 2000s. Today, EA Sports games are released for PlayStation 4, XBox One, and, in some cases, PC (Flemming 2007). Addiotionally, almost all titles are released in a digital format - you download the game onto your console rather than going to a physical store to buy a physical game.

EA Sports franchises experienced an incredible amount of growth with sixth generation gaming consoles. EA chose to diversify the platforms they made their games for instead of just working with Nintendo. This allowed them to publish games across multiple platforms and in multiple languages so that games would reach the widest possible audience. EA Sports lead this charge. Popular franchises like *FIFA, Madden,* and *Need for Speed* were able to be quickly updated on PlayStation 2, XBox, and Gamecube alike (Elsam 2019). This set the groundwork for the weekly updates that many franchises use today to reflect weekly injuries, skill changes, or game updates.

New Technology

One of the most important aspects of EA Sports today is their advanced research and technology. As referred to above, Hawkins understood the importance of game authenticity, which is why he consulted world class athletes and coaches while designing games instead of just slapping their faces on the cover. EA Sports now uses technology for authenticity as well. A prime example of this is EA Sports’ partnership with Jacquard, a Google technology company. Jacquard’s technology is a small insert able to be placed in any Adidas shoe that tracks a player’s performance. Then, this data will be used to update player profiles in *FIFA* (Gorsler 2020).

ESports

One obvious question regarding EA Sports is "if EA Sports is so dominant in sports video games, why are they not the ESports leaders as well?". Their franchises undoubtedly have the viewerbase required to be successful as they own many of the most popular sports games worldwide, but they have elected to take a different path. Instead of committing full fledged to the ESports boom, EA Sports is oriented around gaining more users and increasing their player retention rate (Hoppe 2019). This connects to ESports via ESports leagues that form primarily around *FIFA* and *Madden*, which have shown steady growth year-over-year (Santana 2019). EA Sports' ESports strategy resembles the same strategy that EA opted for during the emergence of sixth generation gaming consoles: user accessibility is key in order to grow long-term profit and industry dominance.

-G.D., Spring 2020

References

Connolly, Eoin. "It's in the Game... The Bright Commercial Future for the FIFA Esports Series." SportsPro, June 26, 2019. https://www.sportspromedia.com/from-the-magazine/fifa-19-esports-series-efootball-christian-volk

"EA Sports." https://www.ea.com/sports

Elsam, Sara. "FIFA's Fight to Join the 'Big Three' of Esports." GamesIndustry.biz, January 9, 2019. https://www.gamesindustry.biz/articles/2019-01-08-over-300-people-are-working-on-esports-at-ea-the-rapid-rise-of-fifa-pro-gaming

Flemming, Jeffrey. "Humble Beginnings." Gamasutra, February 16, 2007. https://www.gamasutra.com/view/feature/130129/we_see_farther__a_history_of_.php?print=

"FIFA 19 ESports Sees 60% Audience Growth." Digital Media Delivery, June 24, 2019. https://advanced-television.com/2019/06/24/fifa-19-esports-sees-60-audience-growth/

Gorsler, Fabian. "Adidas Has Finally Turned EA Sports FIFA Into Real Life." Highsnobiety., March 10, 2020. https://www.highsnobiety.com/p/adidas-ea-sports-fifa-real-life/

Hoppe, David. "EA Leads the Competition in Sports Video Games, So Why Don't They Lead in Esports?" Gamma Law. David Hoppe October 8, 2019. https://gammalaw.com/ea-leads-the-competition-in-sports-video-games-so-why-dont-they-lead-in-esports/

Mai, HJ. "EA Sports Shells Out $85M Over Three Years To Become Premier League's Lead Partner." Sports Business Daily, August 10, 2016. https://www.sportsbusinessdaily.com/Global/Issues/2016/08/10/Marketing-and-Sponsorship/EA-Sports-Premier-League.aspx

Robinson, Jon. "EA vs. 2K: The Results." IGN. IGN, June 17, 2012. https://www.ign.com/articles/2006/01/06/ea-vs-2k-the-results

Santana, Danni. "Madden Esports League Sees Steady Growth With The NFL In Its Corner." Front Office Sports, December 31, 2019. https://frntofficesport.com/nfl-madden-esports-league/

Takahashi, Dean. "How Electronic Arts Is Responding to the Esports Explosion." VentureBeat. VentureBeat, June 14, 2018. https://venturebeat.com/2018/06/13/how-electronic-arts-is-responding-to-the-esports-explosion/

Entertainment Software Rating Board (ESRB)

Overview

The Entertainment Software Rating Board (ESRB) is an U.S.-based, non-governmental, and non-profit organization whose main job is to assign ratings for electronic entertainment, especially video games. The ESRB ratings do not reflect the quality of games (Ruggill and McAllister, 2016). Instead, the ESRB rating system evaluates age-appropriateness, content, and interactive elements ("ESRB, Rating Guide,"n.d.). The ESRB also provides services including consulting, limited legal protection, and content monitoring to its privacy certified members ("ESRB, Privacy certified members,"n.d.).

History

The rise of the ESRB intertwines with the public controversy on video games. By the early 1990s, graphics technology had become advanced enough to allow video game developers to create lifelike scenes and characters. However, such technological sophistication also led to depictions of violence and gore in video games, as well as debates revolving this phenomenon (Cross, 2006). Resonating with the controversy, Senator Joseph Lieberman and Senator Herb Kohl initiated *Joint Hearings Examining the Need to Establish Rating Standards for Electronic Video Games and Other Media* in late 1993/early-to-mid 1994 to call for governmental regulations on video games (Ruggill and McAllister, 2016). This congressional action resulted in the video game industry proposing two rating systems to avert any government-imposed rating system: the ESRB and RSAC rating system (Kline, 2003).

The ESRB system was issued by the Interactive Digital Software Association (IDSA), a trade association formed by major game companies such as Electronic Arts, Nintendo, and Sony (Cross, 2006). While video game developers generally adapted the ESRB system, PC game companies followed the Recreational Software Advisory Council (RSAC) rating system (Kline, 2003). The Senators eventually decided to accept the IDSA proposal; hence a non-governmental rating board, the ESRB, was constituted (Ruggill and McAllister, 2016).

The Function of Video Game Rating System

A video game rating system is a system classifies the suitability of video games to consumers. There are multiple video game rating systems worldwide. Most of the rating systems are either conducted directly by the government or by localized organizations. Some rating systems are statutory but enforced by the video game industry. All video game rating systems are intended to provide consumers recommendations regarding the appropriateness of the game for various age groups by offering indications about the types of content consumers would encounter. Parents would often use video game rating systems as references to determine their choices on video game consumption.

Several members from rating authorities, including the ESRB, developed a new rating organization, International Age Rating Coalition (IARC) in 2013 (“International Age Rating Coalition, About IARC,”n.d.). The IARC, however, only provides a set of online questionnaire guides to video game developers to simplify the rating process. Video game rating systems may use the IARC system as a reference to assign ratings since the IARC questionnaires address various criteria used by rating systems across the world (Ruggill and McAllister, 2016). The IARC itself does not rate video games.

ESRB Rating System

The ESRB rating system is derived from the Motion Picture Association of America (MPAA) for the film industry (Tocci, 2008). Currently, the ESRB rating system only applies to console and PC games, not including mobile games (Brightman, 2015).

The ESRB has five rating categories to indicate age appropriateness: “Everyone” (E), “Everyone 10+” (E+), “Teen” (T), “Mature” (M), and “Adults Only” (AO). All video games should have their ESRB ratings presented on the front of the packaging (Exhibit 1). For video games that have not received a final rating: they shall use “Rating Pending” (RP) in marketing, advertising, and promotional materials until they receive a final rating (“ESRB, Rating Guide,”n.d.). Alongside the rating category, the ESRB also provides a content descriptor to the game. Content descriptors are short and descriptive to the objectionable content in the game (Exhibit 2).

Exhibit 1: Example of the ESRB rating on physical products (Good, 2018)

CONTENT DESCRIPTORS

- **Alcohol Reference** - Reference to and/or images of alcoholic beverages
- **Animated Blood** - Discolored and/or unrealistic depictions of blood
- **Blood** - Depictions of blood
- **Blood and Gore** - Depictions of blood or the mutilation of body parts
- **Cartoon Violence** - Violent actions involving cartoon-like situations and characters. May include violence where a character is unharmed after the action has been inflicted
- **Comic Mischief** - Depictions or dialogue involving slapstick or suggestive humor
- **Crude Humor** - Depictions or dialogue involving vulgar antics, including "bathroom" humor
- **Drug Reference** - Reference to and/or images of illegal drugs
- **Fantasy Violence** - Violent actions of a fantasy nature, involving human or non-human characters in situations easily distinguishable from real life
- **Intense Violence** - Graphic and realistic-looking depictions of physical conflict. May involve extreme and/or realistic blood, gore, weapons and depictions of human injury and death
- **Language** - Mild to moderate use of profanity
- **Lyrics** - Mild references to profanity, sexuality, violence, alcohol or drug use in music
- **Mature Humor** - Depictions or dialogue involving "adult" humor, including sexual references
- **Nudity** - Graphic or prolonged depictions of nudity
- **Partial Nudity** - Brief and/or mild depictions of nudity
- **Real Gambling** - Player can gamble, including betting or wagering real cash or currency
- **Sexual Content** - Non-explicit depictions of sexual behavior, possibly including partial nudity
- **Sexual Themes** - References to sex or sexuality
- **Sexual Violence** - Depictions of rape or other violent sexual acts
- **Simulated Gambling** - Player can gamble without betting or wagering real cash or currency
- **Strong Language** - Explicit and/or frequent use of profanity
- **Strong Lyrics** - Explicit and/or frequent references to profanity, sex, violence, alcohol or drug use in music
- **Strong Sexual Content** - Explicit and/or frequent depictions of sexual behavior, possibly including nudity
- **Suggestive Themes** - Mild provocative references or materials
- **Tobacco Reference** - Reference to and/or images of tobacco products
- **Use of Alcohol** - The consumption of alcoholic beverages
- **Use of Drugs** - The consumption or use of illegal drugs
- **Use of Tobacco** - The consumption of tobacco products
- **Violence** - Scenes involving aggressive conflict. May contain bloodless dismemberment
- **Violent References** - References to violent acts

Exhibit 2: List of Content Descriptors (“ESRB, Rating Process,”n.d.)

Ever since its establishment, the ESRB rating system remains to be the only rating system used for video games in America (Cross, 2017). However, its influence expands outside the United States. In Canada, video games are by law obliged to be evaluated by the ESRB rating system in at least half of the country’s provinces (Felini, 2014). Even though Mexico has been using the ESRB rating system as well, the country shows the tendency to move away from the ESRB system as soon as they finished developing its own system (Ruggill and McAllister, 2016).

Rating Process

Physical video games follow a "Long Form" rating process ("ESRB, Rating Process," n.d.). Video game publishers are required to complete a questionnaire where all factors related to the game's rating are addressed. They shall also submit description and depiction about the most off-putting content to the ESRB prior to the public release. Such submission should consist of "hidden" content that would only appear after the game is completed or reached certain levels. Publishers may also submit an alpha or beta prototype version of the game if applicable (Tocci, 2008). The price for ESRB "Long Form" ratings varies based on the cost of the game development: $4,000 for games cost more than $250,000 and $800 for those cost less than $250,000 to develop.

Digitally-delivered games and apps are rated with the IARC process ("ESRB, Rating Process," n.d.). Similar to the "Long Form" process, publishers are also given a questionnaire that requires information about everything that might affect the rating. Unlike the "Long Form," the IARC process is cost-free. Prior to June 2018, the ESRB used "Short Form" system for non-physical games (Batchelor, 2018). DLC does not need to resubmit for new ESRB rating as long as its content does not exceed the existing core product ("ESRB, Rating Process,"n.d.).

The ESRB has six full-time raters to conduct the rating (Matthews, 2007). Each rater is trained particularly on interpreting gameplay footage for three to six weeks. The ESRB assigns three or more raters for the rating of one video game depending on the information received (Matthews, 2007). During the rating process, raters review every element provided by the publishers. ESRB raters use previous ratings as references to ascertain their evaluation of game scenes (Tocci, 2008).

Publishers are entitled to appeal a rating after the ESRB released their rating decisions. It is so far unknown if any publishers have used this right (Matthews, 2007). However, it is common for video game publishers to revise and resubmit their games for a different rating. The ESRB does not officially reveal the rationale of a specific rating; hence publishers do not have knowledge about which content to alter if they want a different rating. The changes made for re-rating are confidential, if not private (Tocci, 2008).

ESRB on the Loot Box Controversy

Ever since the fall of 2017, loot boxes have raised viral debates on its mechanic. People are arguing that instead of a harmless in-game microtransaction method, loot boxes are gambling. Senator Maggie Hassan sent a letter to the ESRB in which she urged the ESRB to take actions and "detail when [loot boxes] are employed" (Sinclair, 2018). In response to the Senator and the controversy, the ESRB announced a new initiative to label video games with in-game purchase systems on February 27th, 2018 (Sinclair, 2018). This label applies to all video games that contain any form of in-game purchases, whether that be on loot boxes, DLC, or paying to

eliminate in-game ads. Earlier in October 2017, the ESRB has addressed the loot box controversy by saying they do not consider loot boxes to be gambling because “the player always gets something out of it” (Sinclair, 2018). In addition, the ESRB set up a site especially to educate parents about in-game purchasing (Tassi, 2018).

-J.S., Spring 2019

References

“Rating Categories, Content Descriptors, and Interactive Elements from ESRB.” 2019. ESRB Logo. Accessed May 5. http://www.esrb.org/ratings/ratings_guide.aspx.

“Rating Process from ESRB.” 2019. ESRB Logo. Accessed May 5. http://www.esrb.org/ratings/ratings_process.aspx.

Brightman, James. "ESRB Expanding to Mobile, Digital Platforms." GamesIndustry.biz. Accessed May 05, 2019. https://www.gamesindustry.biz/articles/2015-03-17-esrb-expanding-to-mobile-digital-platforms.

Cross, William. "Hot Coffee and Freeze-Dried First Amendment Analysis: The Dubious Constitutionality of Using Private Ratings for Public Regulation of Video Games." 2017. Accessed May 4, 2019. doi:10.31229/osf.io/jp2y4.

Dogruel, Leyla, and Sven Joeckel. "Video Game Rating Systems in the US and Europe." International Communication Gazette75, no. 7 (2013): 672-92. Accessed May 4, 2019. doi:10.1177/1748048513482539.

Felini, Damiano. "Beyond Today’s Video Game Rating Systems." Games and Culture10, no. 1 (2015): 106-22. Accessed May 4, 2019. doi:10.1177/1555412014560192.

Good, Owen S. "ESRB Introducing 'in-game Purchases' Label in Response to Loot Box Controversy." Polygon. February 27, 2018. Accessed May 05, 2019. https://www.polygon.com/2018/2/27/17057978/esrb-loot-crate-box-in-game-purchases-label.

Kline, Stephen, and Nick Dyer-Witheford. Digital Play: The Interaction of Technology, Culture, and Marketing. Montréal: McGill-Queens University Press, 2014.

Matthews, Matt. "This Game Is Not Yet Rated: Inside The ESRB Ratings System." Gamasutra. Accessed May 05, 2019. http://www.gamasutra.com/view/feature/130387/this_game_is_not_yet_rated_inside_.php.

Phil Terzian, Director. 2019. “Privacy Compliance Consultation by ESRB Privacy Certified.” ESRB Logo. Accessed May 5. http://www.esrb.org/privacy/.

Ruggill, Judd Ethan, and Ken S. McAllister. “E(SERB) Is for Everyone: Game Ratings and the Practice of Content Evaluation.” Video Game Policy Production, Distribution, and Consumption, Oct. 2015. Accessed May 5. https://www.taylorfrancis.com/books/e/9781315748825.

Sinclair, Brendan. "Loot Boxes Aren't Gambling - ESRB." GamesIndustry.biz. Accessed May 05, 2019. https://www.gamesindustry.biz/articles/2017-10-11-loot-boxes-arent-gambling-esrb.

Sinclair, Brendan. "Senator Calls on ESRB to Re-consider Loot Boxes." GamesIndustry.biz. February 14, 2018. Accessed May 05, 2019. https://www.gamesindustry.biz/articles/2018-02-14-senator-calls-on-esrb-to-re-consider-loot-boxes.

Tassi, Paul. "The ESRB Is Being Willfully Obtuse About Loot Boxes, And Will Never Be Any Help." Forbes. February 28, 2018. Accessed May 05, 2019. https://www.forbes.com/sites/insertcoin/2018/02/28/the-esrb-is-being-willfully-obtuse-about-loot-boxes-and-will-never-be-any-help/#3a46b0616877.

Tocci, Jason. "Seeking Truth in Video Game Ratings: Content Considerations for Media Regulation." International Journal of Communication 2, 2008, 561-86. Accessed May 4, 2019. https://ijoc.org/index.php/ijoc/article/view/149/176.

Epic Games, Esports

Overview

Epic Games' esports division consists of two primary pillars: the Fortnite Championship Series (FNCS) and the Rocket League Championship Series (RLCS). The FNCS completed its 17th season in October 2023 with the FNCS Global Championship held in Copenhagen. This event gathered the world's top 150 duos to compete for a portion of a $4 million prize pool (Fragen 2023). The event viewership was an increase from the years prior, and the fourth most viewed event in *Fortnite* esports history (Nordland 2023). Meanwhile, the RLCS finished its 12th season in August of 2023 with a substantial $6 million prize pool. The world championships saw 24 teams battle in Düsseldorf, Germany for a prize pool of $2.1 million. The RLCS continues to be one of the most popular esports leagues in the world. Both the FNCS and RLCS stand as essential components of Epic Games' esports brand and economic framework.

History of Epic Games Esports

In May 2018, Epic Games announced they would be supplying a $100 million prize pool for their 2018-2019 season of *Fortnite* esports. For reference, that was more than the combined earnings of the top ten esports prize pools of 2017 (Valentine 2018). Quickly after the announcement, Epic hosted its first official esports event: the Pro-Am Tournament at E3. The tournament combined professional *Fortnite* streamers with amateur celebrities to compete in a duos tournament with a prize pool of $3 million (Batchelor 2018). The event brought in a record-setting 1.46 million concurrent viewers for Twitch and signified an optimistic future for *Fortnite* esports (Batchelor 2018). Following the Pro-Am tournament, Epic Games announced they would be having the first-ever Fortnite World Cup in 2019, bringing together the best players from around the world to compete for a $30 million prize pool (Taylor 2018).

Following these announcements, *Fortnite* held its first two official public tournaments: the Summer Skirmish and Fall Skirmish. The 8-week events had prize pools of $8 million and $10 million respectively. The event's finales were held in person at PAX West and TwitchCon. These tournaments allowed Epic Games to experiment and create matches with less hiding, more action, and better live commentary (Tassi 2018). Epic Games also noticed decreased latency issues during in-person finale events. The previous online qualifier portions of the tournament had suffered from heavy server issues, while the in-person finales had all competitors in one room on connected computers (Miceli 2018). The advantages of an in-person finale informed Epic's decision to continue that format into its biggest event of the year: the inaugural 2019 Fortnite World Cup.

The 2019 Fortnite World Cup

The Fortnite World Cup included ten weeks of online qualifiers that gave amateurs and professionals the chance to qualify for the in-person finale event. Over the ten weeks, 40 million players participated in the qualifying rounds for 200 spots in the finale (100 solos and 50 duos) (Fahey 2019). The 200 qualifying players then competed in person at the Arthur Ashe Stadium in New York City to take home some of the $30 million prize pool; the largest for a single event at the time. Kyle "Bugha" Giersdorf was eventually crowned the first-ever Fortnite World Cup

champion and claimed the grand prize of $3 million (Handrahan 2019). Due to the COVID-19 pandemic in 2020, in-person events and the Fortnite World Cup were canceled indefinitely (Batchelor 2020). The Fortnite World Cup never returned, but was eventually replaced with the FNCS Global Championship.

The Fortnite Championship Series

After expectations for esports revenue fell short in 2019, Epic drastically cut down its allocations towards overall prize money. In 2020, the prize pool for the entire year was $17 million compared to the $100 million from the previous year (Fairfax 2021). Epic began focusing less on large in-person events with substantial prize money, and more on smaller more frequent tournaments. These competitive tournaments were looped under the name Fortnite Championship Series. While the format for the FNCS has changed from season to season, the format for the 2022-23 season had three splits - Major 1, Major 2, and Major 3 - each with three weekly events leading to a major tournament. Then, the best players from each region attempted to qualify for the international championship tournament worth $4 million (Fragen 2023). The overall prize pool has dropped since the FNCS's creation in 2019, with just $10 million allocated in 2023 (down from the $17 million allocated in 2022). Despite the drop in the prize pool, the 2023 Global Championship event saw a substantial increase in viewership with 720,000 peak viewers. The FNCS is streamed on the official *Fortnite* Twitch, YouTube, Facebook, TikTok, and the *Fortnite* website. Additionally, the public can attend the finale event physically.

The Rocket League Championship Series

The RLCS started in 2016 through a collaboration between Psyonix and Twitch (the exclusive RLCS streamer then). The inaugural season kicked off *Rocket League* esports with a prize pool of $75,000. The RLCS was originally comprised of bi-annual seasons and included a secondary division called the Rocket League Rival Series (RLRS). Through the secondary division, less established teams were able to compete for spots in the upcoming RLCS season (Fandom 2023). Conversely, the worst-performing teams in the RLCS could be bumped down into the RLRS. The RLRS was meant to give lower-tier teams more opportunities, but ultimately the league served more as a barrier preventing teams from advancing. In 2019, Epic Games decided to acquire Psyonix, and subsequently, *Rocket League* and the RLCS (Handrahan 2019). With the acquisition came the end of the RLRS and a new competitive season structure for the RLCS. Instead of bi-annual seasons, there would be a year-long season containing three splits (fall, winter, and spring). Each split would contain four events: Open, Cup, Invitational, and Major (Handrahan 2020). Unlike the old format for the RLRS, the Open event would allow any team to compete for a chance at the prize. For the 2022-23 season, the three splits shared $6 million of the prize pool, while the World Championship used the remaining $4 million (Handrahan 2020). The events can be streamed either on Twitch or YouTube, depending on the region. The RLCS remains one of the biggest esports leagues in global esports, attracting the best teams and players from across the world to compete and watch.

Layoffs

In September 2023, Tim Sweeney (CEO of Epic Games) announced they would be laying off 16% of the employees at the company (Parrish 2023). The layoffs were reportedly attributed to cost-cutting measures following overspending (Parrish 2023). Epic's esports investments in

2019-20 are an example of this overspending. Additionally, it was reported that a substantial amount of the *Rocket League* esports team was cut, leaving very few members left (Nordland 2023). It is unclear as to the reason for the layoff of *Rocket League* esports employees specifically, as the RLCS remains one of the most popular esports leagues in the world.

- J.Y., Fall 2023

References

Batchelor, James. "Fortnite breaks record for concurrent Twitch viewers." *GamesIndustry.biz*, June 19, 2018. Accessed October 18, 2023. https://www.gamesindustry.biz/fortnite-breaks-record-for-concurrent-twitch-viewers.

———. "Fortnite World Cup and Dota 2 International cancelled." Games Industry.biz. Last modified May 1, 2020. Accessed December 13, 2023. https://www.gamesindustry.biz/fortnite-world-cup-and-dota-2-international-cancelled.

Fahey, Rob. "The Fortnite World Cup is a glimpse of esports' future | Opinion." *GamesIndustry.biz*, August 2, 2019. Accessed October 18, 2023. https://www.gamesindustry.biz/the-fortnite-world-cup-is-a-glimpse-of-esports-future.

Fairfax, Zackerie. "Fortnite's Esports revenue explains why there hasn't been another World Cup." Fortnite Intel. Last modified May 4, 2021. Accessed December 13, 2023. https://www.fortniteintel.com/esports/fortnite-esports-overestimated-income-world-cup-38593/.

Fragen, Jordan. "Fortnite Champion Series changes format, keeps $10M prize pool." GamesBeat. Last modified January 11, 2023. Accessed December 13, 2023. https://venturebeat.com/games/fortnite-champion-series-fncs-2023-format-10m-prize-pool/.

Handrahan, Matthew. "Overwatch League commissioner joins Epic's Fortnite esports push." *GamesIndustry.biz*, May 28, 2019. Accessed October 18, 2023. https://www.gamesindustry.biz/overwatch-league-commissioner-joins-epics-fortnite-esports-push.

———. "Psyonix commits $4.5m a year in prizes to Rocket League esports." Games Industry.biz. Last modified July 22, 2020. Accessed December 13, 2023. https://www.gamesindustry.biz/psyonix-commits-usd4-5m-a-year-in-prizes-to-rocket-league-esports.

———. "Winner of the Fortnite World Cup took home $3m." *GamesIndustry.biz*, July 29, 2019. Accessed October 18, 2023. https://www.gamesindustry.biz/winner-of-the-fortnite-world-cup-took-home-usd3m.

Miceli, Max. "Fortnite Draws Highest Viewership for October with Fall Skirmish Finale at TwitchCon." *The Esports Observer*, October 29, 2018. Accessed October 18, 2023. https://archive.esportsobserver.com/fortnite-fall-skirmish-twitchcon-2/.

Nordland, Jake. "Epic Games lays off 16% of workforce, Rocket League esports majorly affected." Esports Insider. Last modified September 29, 2023. Accessed December 13, 2023. https://esportsinsider.com/2023/09/epic-games-layoffs-rocket-league.

Parrish, Ash. "Epic Games cuts around 830 jobs." The Verge. Last modified September 28, 2023. Accessed December 13, 2023. https://www.theverge.com/2023/9/28/23894266/epic-games-layoffs-fortnite-unreal-engine.

Rizzo, Tim. "Epic Games announces details for World Cup, $100 million in prizes for 2019." *Inven Global*, February 22, 2019. Accessed October 19, 2023. https://www.invenglobal.com/articles/7645/epic-games-announces-details-for-world-cup-100-million-in-prizes-for-2019.

"Rocket League Rival Series." Fandom. Accessed December 13, 2023. https://rocketleague.fandom.com/wiki/Rocket_League_Rival_Series.

Tassi, Paul. "'Fortnite' Summer Skirmish Crowns Its Grand Winner, But Not Without Drama." *Forbes*, September 3, 2018. Accessed October 18, 2023. https://www.forbes.com/sites/insertcoin/2018/09/03/fortnite-summer-skirmish-crowns-its-grand-winner-but-not-without-drama/?sh=79aa165b71d3.

Taylor, Ivy. "Epic Games announces 2019 Fortnite World Cup as game reaches 125m players." *GamesIndustry.biz*, June 13, 2018. Accessed October 18, 2023. https://www.gamesindustry.biz/epic-games-announces-2019-fortnite-world-cup.

Valentine, Rebekah. "Epic Games to provide $100 million prize pool for Fortnite esports this year." *GamesIndustry.biz*, May 21, 2018. Accessed October 18, 2023. https://www.gamesindustry.biz/epic-games.

Epic Games Store

Overview

The Epic Games Store is a digital distribution storefront for PC games. It launched on December 6th, 2018 for Microsoft Windows and macOS (Sweeney 2018). The storefront was created and published by software and video game development company Epic Games, Inc. The Epic Games Store is the publishing arm of the company's videogame development services. Epic Games facilitates development through its Unreal Engine, operation and scale through its Online Services SDK, and now publishing and distribution through the Epic Games Store. Epic's approach to game development services allows a PC game to be developed, launched/operated, and sold entirely within the Epic Games ecosystem. The largest digital PC game storefront is Steam, operated by Valve Inc. Epic Games CEO Tim Sweeney is positioning the Epic Games Store as a direct competitor with Valve, under the mantra that more competition will result in a better deal for developers (Sweeney 2018).

At launch the Epic Games store had three third-party games available for sale. Ashen developed by A44 and published by Annapurna Interactive. Hades released in early access by Supergiant Games, and Hello Neighbor: Hide and Seek developed by tinyBuild (Hall 2018). These three titles joined the Fornite Battle Royal and Unreal Tournament, both were games developed by Epic and already available on the platform. On December 14th, 2018, Darksiders 3, Subnautica, and Super Meat Boy joined the platform (Hall 2018). This small launch selection has since been expanded under a strict standard of quality. Epic CEO Tim Sweeney described the store's quality standard as "reasonably good quality games, of any scale, whether small indie games to huge triple-A games" (Wilde 2019). Epic will also allow M-rated games but won't distribute porn games or asset flips. This highly curated platform is differentiating itself from Steam where any developer can upload a game for sale, if they pay the cover charge of $100. As of March 20, 2019, the Epic Games Store's userbase reached 85 million players (Statt 2019).

Revenue Split with Developers

The Epic Games Store main differentiator from its competitor Steam is its more developer friendly revenue split. As a video game distributor Epic takes a portion of revenue generated from third-party sales on their platform. Epic takes 12% of revenues from sales while the game's developer receives 88% of revenue (Sweeney 2018). Steam's revenue split is less favorable as the platform takes 30% of revenues and the game developers receive 70%. Epic Games is also the creator of the video game development engine Unreal Engine 4. Using this engine means the developer must pay 5% of revenue to Epic Games as part of a licensing agreement. If a developer is using UE4 on the Steam store, then they only receive 65% of revenues (Sweeney 2018). Epic Games has allowed developers to use the engine on the Epic Games Store without having to pay an extra 5% in revenues.

Epic Games CEO Tim Sweeney explains that The Epic Games Store's more charitable revenue split, in comparison to Steam is made possible by reducing the storefront's markup. Tim Sweeney sets his estimate of the real cost to a digital storefront at a high of 7%. This figure is broken down into 2.5-3.5% for processing major payment methods, less than 1.5% for costs

related to content delivery network costs, and 1-2% for customer support and operating expenses. This data was estimated based Fortnite's frequent content delivery schedule and higher than average operating costs. Epic's CEO also promises to lower its 12% revenue cut if payment processing companies are willing to lower fees (Bertz 2018). This revenue split is one of the major ways that the Epic Games Store is attempting to attract developers away from the Steam store.

Epic Games Store Developer Features

The second way the Epic Games store is attracting third-party developers is through their developer features. The Epic Games Store was designed to provide tools for developers to reach players and target content creators. The store focuses on content creators as a source for game discovery rather than an algorithm-based store. The Epic Games Store provides small developers with the tools to reach these creators. Developers can distribute affiliate codes to content creators on YouTube and Twitch through Epic's Support-A-Creator program (Sweeney 2018). Content creators earn revenue from the game sales made using their custom affiliate link. Game developers can set the rate of revenue share as well as give creators free access to their game. For developers opting into the Support-A-Creator feature, Epic Games pays the first 5% of revenue share with creators for two years. Epic is willing to front this cost because the return on investment for small and mid-sized develops is greater when there is a promotional campaign. Epic Games is also developing a backend dashboard allowing developers to see their games metadata and player analytics. This dashboard is based on the Steam Spy API and is currently under development with no release date set. Additional developer features come in the form of cloud save functionality enabled on July 25th, 2019 and an achievement system still in development (Rebekah 2019).

Functionality of the Epic Games Store

The Epic Games Store targets a younger demographic that came to the storefront through Epic's widely popular game Fortnite Battle Royale. Of all Fortnite players only half had Steam installed and 60% of users with Steam did not use it actively (Rebekah 2019). This data provided Epic with the philosophical basis for the streamlining of the store's features. Eliminating old and unsustainable features of older storefronts while focusing on minimalist design. The store has no review system or complex recommendation algorithms. The Epic Games Store's UI has a minimalist design and features a global newsfeed (figure 1). This page is a portal for developers to provide information on game updates and release news. Users who purchase a game automatically subscribe to the developer's newsfeed. Developers have complete control of the feed and there is no cross marketing or paid ads. This portal is a continuation of Epic's focus on the direct player developer relationship. The Store tab features games available for sale categorized as new releases, two free games available weekly, top sellers, coming soon, and rising (figure 2). The Epic Games store launched a four-week long "Mega Sale" on May 16, 2019 where it took $10 off the price of every game over $14.99 (Kerr 2019). For this promotion Epic Games covered the loss for developers with the goal of increasing the install base of games on its platform. The Epic Games Store also features social and friends list functionality as well as voice communication. Planned updates include Wishlist and the ability to see critic reviews from Metacritic (Epic 2019).

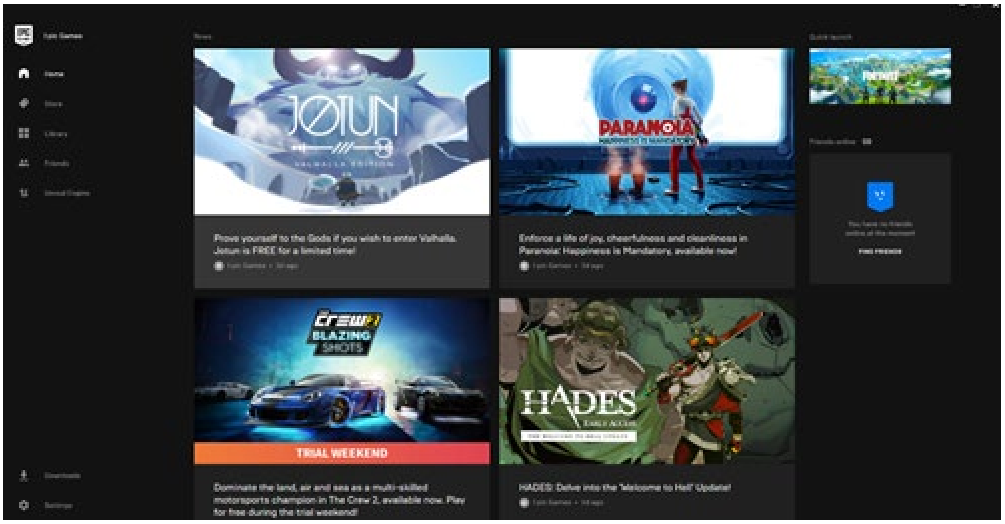


Figure 1: Screen capture of Epic Games Store Application Global News Feed as of December 8, 2019

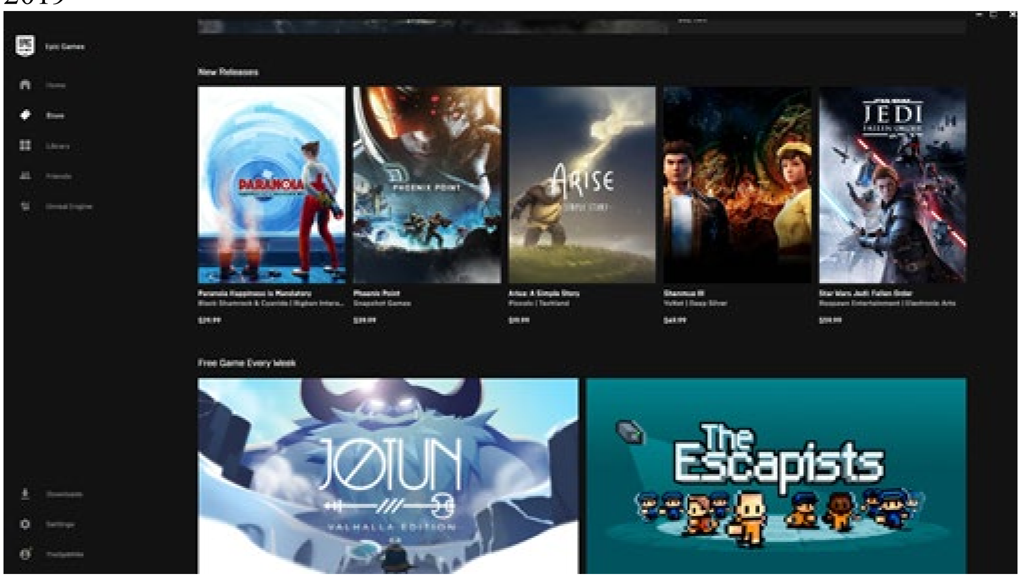


Figure 2: Screen capture of Epic Games Store Application Store Page as of December 8, 2019

Store Exclusives

The Epic Games store has pursued exclusives to add value to its platform and attract players away from Steam. Epic Games secures exclusives for the Epic Games store through a combination of development funding, marketing commitments, and revenue guarantees. Within its revenue guarantees, Epic Games promises that a game release on its store will generate a certain amount of revenue. If the game fails to reach that revenue goal, then Epic Games will make up the difference to the developer. Using these tactics, the Epic Games Store acquired The Division 2 published by Ubisoft as the first AAA release to bypass Steam for the Epic Games Store (McAloon 2019). The Division 2 launched on its publisher's digital distribution platform Uplay as well as The Epic Games Store. The second title acquired was Metro Exodus. Metro's publisher Deep Silver cited that Epic's better revenue split would allow the publisher to invest more into content development and possibly reduce prices (Kuchera 2019). Both titles becoming Epic Games Store exclusives caused controversy because they were initially available for pre-

order on Steam. Eventually it was announced that Steam pre-orders would be honored, and Metro Exodus would be available on the platform in February of 2020. As of November 14th, 2019, there are 86 games that are PC exclusive to the Epic Games store (Mates 2019). Some of these titles will become available on other platforms after the term of their exclusivity deal expires. Epic plans to eventually stop paying for exclusives when its user base reaches a parity with Steam or if Valve commits to the same 88% revenue split as Epic. Epic also promised to place their own games, including Fortnite on the Steam platform if Valve agrees to the revenue split (Watts 2019).

-M. B., Fall 2019

References

Batchelor, James. 2019. "Epic Games Store Line-up Expands with Private Division, More Ubisoft Titles and Quantic Dream Exclusives." *GamesIndustry.biz*. March 20. https://www.gamesindustry.biz/articles/2019-03-20-epic-games-store-line-up-expands-with-private-division-more-ubisoft-titles-and-quantic-dream-exclusives.

Bertz, Matt. 2018. "Tim Sweeney Answers Questions About The New Epic Games Store." *Game Informer*. December 4. https://www.gameinformer.com/2018/12/04/tim-sweeney-answers-questions-about-the-new-epic-games-store.

"Epic Games.com." 2019. *Epic Games.com*. Epic Games. Accessed December 8. https://www.epicgames.com/store/en-US/.

Grayson, Nathan. 2018. "The Guy Behind Steam Spy Has Been Working On Epic's Store For Years." *Kotaku*. Kotaku. December 6. https://kotaku.com/the-guy-behind-steam-spy-has-been-working-on-epics-stor-1830890162.

Hall, Charlie. 2018. "The Epic Games Store Is Live, Here's All the Titles It Will Have for Sale." *Polygon*. Polygon. December 7. https://www.polygon.com/2018/12/6/18129978/epic-games-store-launch-games-list-mac-os-windows-pc-tga-2018.

Horti, Samuel. 2018. "Epic's Tim Sweeney Reveals How the Company Lands Exclusives for the Epic Store." *Pcgamer*. PC Gamer. December 27. https://www.pcgamer.com/epics-tim-sweeney-reveals-how-the-company-lands-exclusives-for-the-epic-store/.

Kerr, Chris. 2019. "Teething Pains for Epic Games Store as Publishers Opt out of Debut 'Mega Sale'." *Gamasutra*. May 7. https://www.gamasutra.com/view/news/342887/Teething_pains_for_Epic_Games_Store_as_publishers_opt_out_of_debut_Mega_Sale.php.

Kuchera, Ben. 2019. "Metro Exodus Ditches Steam to Become an Epic Games Store Exclusive." *Polygon*. Polygon. January 28. https://www.polygon.com/2019/1/28/18200610/metro-exodus-epic-games-store-exclusive-pc.

Mates, Robert Bogdan. 2019. "Epic Games Store Exclusives - List of Games Only Available on the Store." *GameWatcher*. November 14. https://www.gamewatcher.com/news/Epic-games-store-exclusives.

McAloon, Alissa. 2019. "The Division 2 Is Skipping Steam in Favor of the Epic Games Store." *Gamasutra Article*. January 9. http://www.gamasutra.com/view/news/334073/The_Division_2_is_skipping_Steam_in_favor_of_the_Epic_Games_Store.php.

"October Feature Update." 2019. *Epic Games*. October 31. https://www.epicgames.com/store/en-US/news/october-feature-update.

Saed, Sherif. 2019. "Epic Games Store Will Give Away a Free Game Every Week for the Rest of 2019." *VG247*. VG247. June 11. https://www.vg247.com/2019/06/11/epic-games-store-free-game-every-week-in-2019/.

"Services." 2019. *Epic Online Services*. Accessed December 8. https://dev.epicgames.com/en-US/services.

Statt, Nick. 2019. "Epic Games Store Chief Says They'll Eventually Stop Paying for Exclusive PC Games." *The Verge*. The Verge. March 21. https://www.theverge.com/2019/3/21/18276181/epic-games-store-exclusives-pc-gaming-fortnite-steve-allison-gdc-2019.

Sweeney, Tim. 2018. "Announcing the Epic Games Store." *Unreal Engine*. December 4. https://www.unrealengine.com/en-US/blog/announcing-the-epic-games-store.

Watts, Steve. 2019. "Epic vs. Steam: The PC Digital Storefront Dilemma For Indies." GameSpot. Accessed December 8. https://www.gamespot.com/articles/epic-vs-steam-the-pc-digital-storefront-dilemma-fo/1100-6471219/.

Wilde, Tyler. 2019. "The Epic Store Won't Accept 'Crappy Games,' Says Tim Sweeney." *Pcgamer*. PC Gamer. March 20. https://www.pcgamer.com/the-epic-store-wont-accept-crappy-games-says-ceo-tim-sweeney/.

Rebekah Valentine. 2019. "Sergey Galyonkin: Epic Games Store Courting a Younger, Steam-Less Audience." *GamesIndustry.biz*. January 14. https://www.gamesindustry.biz/articles/2019-01-14-sergey-galyonkin-epic-games-store-courting-new-younger-audience.

Facebook Gaming

Overview

Facebook Gaming is the Facebook platform's hub for gaming, launched in 2019 (Valentine 2019). It can be accessed through the dedicated Facebook Gaming tab on the Facebook app or on https://www.facebook.com/gaming. The Facebook Gaming tab hosts a feed of content featuring instant games that can played with friends, videos to watch from top streamers, esports organizations and game publishers, and updates from users' own gaming groups (Perez 2019).

Facebook Gaming is a consolidation of different gaming-related features that have been developed by Facebook, including but not limited to gaming videos and Instant Games, which have lived on the News Feed and Messenger, respectively. According to Vivek Sharma, the company's head of gaming, more than 700 million people a month play, watch, or hang out in gaming groups on Facebook (Khan 2019). As Facebook and its offerings have grown, the company has sought to redesign and declutter the Facebook platform experience (Summers 2020). At the same time, Facebook has invested more heavily in gaming and sought to make it a distinct key feature of its platform. Facebook Gaming was launched as part of an effort to "provide personalized shortcuts for people to easily access the communities and content they interact with most" (Raji 2019).

Facebook Gaming Origin and Development

The core features of Facebook Gaming began as a standalone website accessed at Fb.gg. This website was a hub where viewers could find a collection of all video games streaming on Facebook (Constine 2018). The goal was to create a feed centered around gaming, as gaming content on a user's normal Facebook News Feed could easily get buried (Constine 2018).

The functionality of the standalone website now exists entirely on the Facebook Gaming tab, and the original https://fb.gg url now redirects to this tab.

In addition to the streaming element, a core feature of Facebook Gaming is Instant Games. Launched in 2016, Instant Games are casual free-to-play games that can be played with friends. Instant Games were initially accessed through the Facebook News Feed and Messenger, with play sessions hosted on the Messenger app. Since the launch of Facebook Gaming, Instant Games have begun a transition off of the Messenger app, with gameplay itself being hosted on the Facebook app (where Facebook Gaming is located) rather than Messenger (Torbet 2019).

The dedicated Facebook Gaming tab was announced in March of 2019. In a blog post shared by Vijaye Raji, VP of Gaming, the three key aspects of Facebook Gaming were outlined as playing games, watching gaming videos, and connecting with gaming groups (Raji 2019). The Facebook Gaming was initially rolled out to a small subset of Facebook users, then released to everyone on

the platform. At the same time, Raji announced that Facebook was also “continuing to beta test a standalone Facebook Gaming app on Android,” which he said would include more features than those in the Facebook Gaming tab (Raji 2019).

A standalone Facebook Gaming app was released for Android in April of 2020, with plans for an iOS version forthcoming pending Apple App Store approval (Schiesel 2020). While it was originally set to be released in June of 2020, the company accelerated its plans as the quarantine’s scope became clear (Schiesel 2020). The app includes much of the same functionality that can be accessed on the Facebook Gaming tab, with the in-app Go Live button allowing users to upload streams of other mobile games on the same device by pressing just a few buttons (Schiesel 2020). This mobile feature is meant to make it easier for gamers to stream mobile games easily without having to download third-party apps or connect the mobile device to a computer, which is required when streaming through Twitch (Schiesel 2020).

Facebook Gaming Functions

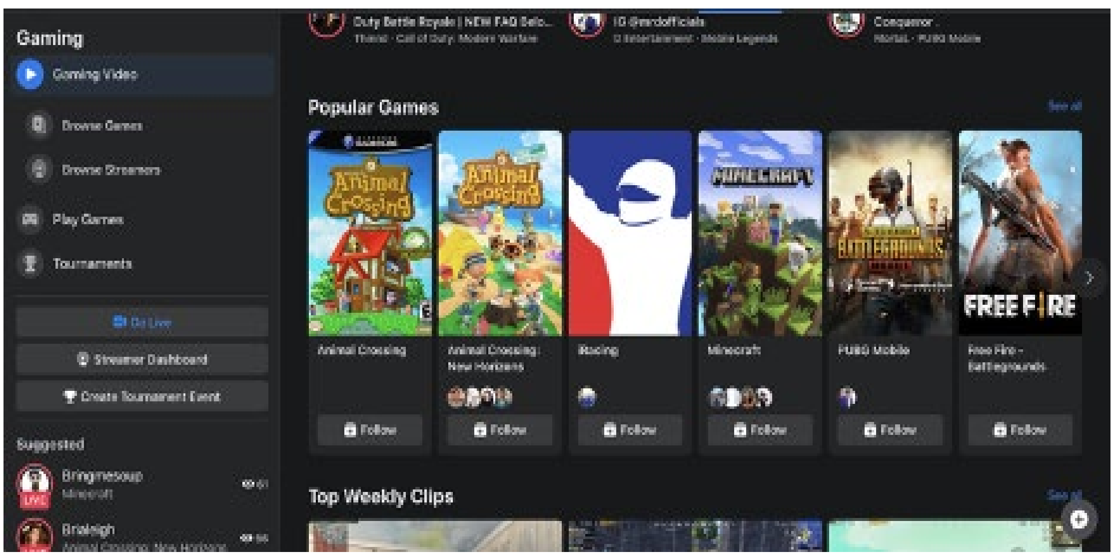


Figure 1: Screen capture of the Facebook Gaming tab on desktop as of May 14, 2020

The Facebook Gaming tab lives on the larger Facebook platform, with a user’s general Facebook dashboard still accessible on the top. The homepage allows you to scroll down to view videos, streamers, and games under categories like Live Now, Popular Games, and Top Weekly Clips. Below each of the streamers and games there is an option to follow them that also shows which friends already follow the page.

All Facebook Gaming pages display a dashboard on the left side with navigation tabs for accessing videos by game or by streamer, playing Instant games, and participating in Tournaments. Below that are features for content creators like an option to go live, a Streamer

Dashboard that takes links to Facebook's Creator Studio, and an option to create a Tournament Event.

Tournaments are a new feature of Facebook Gaming "originally designed as a tool to support live gaming events and tournaments" (Takahashi 2020). They can be accessed through the Facebook Gaming sidebar or by going to https://www.facebook.com/gaming/tournaments. Facebook Tournaments leverage Facebook event functionality to create Tournament Events, which can contain one or more tournaments. Event admins have the ability to set the date and time, description, set visibility, and add co-hosts. In addition to these event capabilities, tournaments also provide functionality for managing participants, brackets and scores while also being able to link to Facebook Gaming's livestream capabilities. The main goal of the tournament feature was to streamline tournament organization, which was happening across Facebook events, pages and groups but in a very fragmented way (Takahashi 2020).

While tournaments were originally set to be launched in June of 2020, Facebook Gaming pushed up the feature's release, launching tournaments for everyone on April 7th of 2020. According to Mina Abouseif in an interview with GamesBeat, "Facebook decided to release it early to help people cope better while in isolation" in light of COVID-19, using tournaments as a way to connect gamers who would normally be meeting in person (Takahashi 2020).

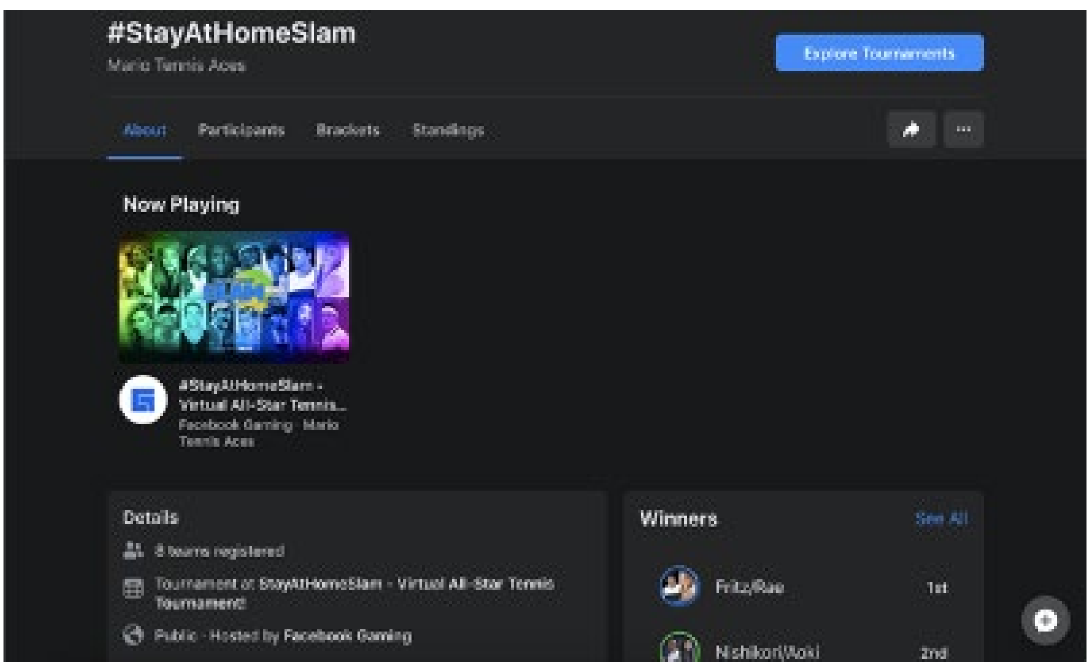


Figure 2: Screen capture of a tournament page as of May 13, 2020

Market Landscape

Twitch has emerged as the dominant player in the video game streaming space, controlling 76 percent of the market in the Americas and Europe (Khan 2019). Facebook and other companies like Microsoft have sought to enter the market with offerings like Facebook Gaming and Mixer, seeing moderate growth in Twitch's shadow. In December 2019, Facebook had an 8.5% share of the overall hours-watched market, with an increase of 210% in hours watched from December 2018 to December 2019 (Grubb 2010).

Facebook Gaming has sought to distinguish itself from its market competitors with its Level Up and Partner program, which grants streamers access to revenue streams (Tenbarge 2019). Streamers can "Level Up," getting access to subscription features and "stars," which can be given to streamers and are equal to one cent (Tenbarge 2019). Beyond the Level Up program, streamers can also become partners, with access to a manager, additional financial support, and the ability to test out features like ads and custom sticker packs. Partnered creators sign a contract, which includes a non-disclosure agreement and an agreement to a streaming quota (Tenbarge 2019). While these programs are structurally similar to streamer incentive programs at Twitch and other competitors, Facebook Gaming streamers have suggested they could make more money on Facebook than on other gaming platforms. This is because Facebook Gaming already has a sizable pre-existing audience. According to streamers interviewed by Business Insider, the ability to share streams into gaming groups and onto their own timeline made a huge difference in being able to build an audience (Tenbarge 2019).

-E.Y., Spring 2020

References

Constine, Josh. 2018. "Facebook launches Fb.gg gaming video hub to compete with Twitch." TechCrunch. June 7. Accessed May 12, 2020. https://techcrunch.com/2018/06/07/facebook-launches-fb-gg-gaming-video-hub-to-compete-with-twitch/

Grubb, Jeff. 2010. "Facebook Gaming grows 210% in 2019 as it battles Twitch, YouTube." VentureBeat. January 9. Accessed May 12, 2020. Facebook Gaming grows 210% in 2019 as it battles Twitch, YouTube

Khan, Imad. 2019. "Why Twitch Is Still the King of Live Game Streaming." The New York Times. December 15. Accessed May 12, 2020. https://www.nytimes.com/2019/12/15/business/tech-video-game-streaming-twitch.html.

Perez, Sarah. 2019. "In a challenge to Twitch and YouTube, Facebook adds 'Gaming' to its main navigation." TechCrunch. March 14. Accessed 5 13, 2020. https://techcrunch.com/2019/03/14/in-a-challenge-to-twitch-and-youtube-facebook-adds-gaming-to-its-main-navigation/

Raji, Vijaye. 2019. "A New Home for Facebook Gaming." Facebook Gaming. March 14. Accessed May 12, 2020. https://www.facebook.com/fbgaminghome/blog/a-new-home-for-facebook-gaming

Schiesel, Seth. 2020. "Facebook to Introduce an App for Gaming." The New York Times . April 19. Accessed May 12, 2020. https://www.nytimes.com/2020/04/19/technology/facebook-app-gaming.html?auth=login-google

Summers, Nick. 2020. "Why Facebook redesigned Facebook.com." engadget. April 29. Accessed May 12, 2020. https://www.engadget.com/facebook-web-browser-redesign-interview-133006571.html

Takahashi, Dean. 2020. "Facebook Gaming launches tournaments for esports amateurs." VentureBeat. April 7. Accessed May 12, 2020. https://venturebeat.com/2020/04/07/facebook-gaming-launches-tournaments-for-esports-amateurs/

Tenbarge, Kat. 2019. "Gamers say they're earning more money on Facebook's streaming platform than on Twitch and YouTube." Business Insider. October 12. Accessed May 12, 2020. https://www.businessinsider.com/gamers-earn-more-money-facebook-gaming-twitch-youtube-mixer-streaming-2019-10

Torbet, Georgina. 2019. "Facebook's Instant Games are leaving Messenger." engadget. July 26. Accessed May 12, 2020. https://www.engadget.com/2019-07-26-instant-games-facebook-gaming-tab.html

Valentine, Rebekah. 2019. "Facebook launching new Gaming Tab." gamesindustry.biz. March 14. Accessed May 12, 2020. https://www.gamesindustry.biz/articles/2019-03-14-facebook-announces-new-gaming-tab

FaZe Clan

Overview

When FaZe Clan was founded in 2010, it was difficult to define ("About Us"). Originally a YouTube channel and Call of Duty clan, FaZe has since evolved into an esports team and a content creation collective ("Everything You Need To Know About FaZe Clan"). It was founded by Eric "CLipZ" Rivera, Jeff "Timid" Emann, and Ben "Resistance" Christensen, who became its three original members, and only grew from there ("Everything…"). Currently, FaZe Clan has over 80 members with over 343 million followers and fans across platforms ("About"). This set of gamers and entertainers plays everything from Valorant to Fortnite to Counter-Strike: Global Offensive, all massively popular shooting games (Lorenz). FaZe Clan became famous not for its gaming skill or its number of esports wins, but its biggest accomplishment may have been its success of bringing gaming into the mainstream. When FaZe Clan opened its doors to investors in 2018, they garnered investments from celebrities like Offset, Pitbull, Yo Gotti, Swae Lee, and more ("Everything…"). Their media empire now includes sponsors like G Fuel energy drink, merch, and vlog content from the Hollywood Hills mansion where several of their members live and work together (Lorenz).

History

Though the members of FaZe now have a vast repertoire of games, they were originally a small group of Call of Duty players who made trick shot videos on YouTube ("FaZe Clan announces…"). Unlike other, more competitive gamers, they were more focused on the entertainment aspect of gaming. Not only were they some of the first prominent gaming celebrities, they were also some of the first big YouTubers, starting their channel when most people had under one million subscribers. They also claim that they were the first YouTube gamers to have face cams (when a smaller screen showing the gamer's face is shown next to the actual gameplay to show reactions), with FaZe Temperrr saying, "We were the first gamers really showing our faces on the internet" ("Can FaZe Clan Build…").

Then, in 2012, FaZe officially began their own esports Call of Duty team and soon after gained one million YouTube subscribers ("Can FaZe Clan Build…"). From there, FaZe quickly grew, gaining subscribers exponentially and becoming more well-known in the gaming community. Their next step was buying a house in New York in 2014, where FaZe members lived, played games, and created content together ("History"). This also gave them the opportunity to begin creating lifestyle content (like vlogs, pranks, etc.) in addition to their gaming-focused content ("History"). Like many other YouTubers at the time, the FaZe Clan relocated to Los Angeles to further their entertainment careers. At this point, they massively expanded their esports repertoire, branching out into Counter-Strike and Overwatch and becoming a major force in the world of competitive Counter-Strike in particular ("History"). All the while, they were recruiting more FaZe members, even some celebrities like the rapper Logic and NFL player Juju Smith-Schuster ("History"). FaZe began to focus more on the business side of its content, creating a clothing brand and even collaborating with various prominent brands like Verizon to create exclusive content ("FaZe Clan Announces…"). To describe FaZe's current place in the entertainment world, FaZe CEO said in a Forbes article, "This is a world where the Harlem

Globetrotters are actually more famous than the Lakers. It's a world where the most entertaining player has a more lucrative career than the best player" ("FaZe Clan Announces…").

Perhaps the most monumental event in FaZe Clan's careers came in 2021, when they both announced their intention to become a publicly traded company in collaboration with a shell company and were valued at over $1 billion, "becoming the first esports company to hit $1 billion valuation," according to Forbes. The deal is set to close in 2022, when the public will see what FaZe holds in its financial future as a publicly listed esports company ("FaZe Clan Announces…").

Members and Structure

FaZe Clan's member base was originally unique in that it relied heavily on not only the gaming skills of its team, but also their personalities and ability to create engaging content. However, FaZe is not the scrappy group of YouTubers it once was. The company is now headed by CEO Lee Trink, a lawyer with a music business background ("Lee Trink"). Several of FaZe Clan's members are part-owners of the organization, and several others are signed to management contracts with FaZe (Lorenz).

Similarly to any talent agency, FaZe Clan and its members agree that FaZe will receive a certain percentage of the profits each gamer makes. This can include brand deals, prize money from tournaments, event appearance fees, and most other streams of revenue that come to FaZe's members (Alexander).

FaZe Clan employs a number of different members with varying degrees of popularity and personalities from all over the world. FaZe Banks, for instance, was one of the clan's founders, and maintains a massively loyal following, much of it on YouTube (Christina). They have collaborated with several celebrities, including Ben Simmons of the Philadelphia 76ers (FaZe Simmo) and rapper Lil Yachty (FaZe Boat) (Christina). FaZe Rug, a newer addition, is known for his lifestyle vlogging as much as (or more than) his gaming (Christina). FaZe also made the news in 2019 for signing FaZe Ewok, a 14-year-old Fortnite prodigy who is deaf and was (then) the organization's first female member (Raga).

Esports Presence

Though FaZe has pivoted primarily to entertainment in recent years, they also maintain a core esports team. The FaZe website lists six main categories of teams: Fortnite, Counter Strike, Call Of Duty, PUBG, Rainbow Six, and Fifa. However, the team that dominates in terms of accolades is by far the Counter Strike: Global Offensive team with twelve national and international trophies ("Teams").

FaZe Clan primarily has North American members and a North American audience (playing games that are most popular within an American crowd), but began slowly integrating other continents in 2016 when they signed a European Counter-Strike team ("History"). From there, they began to sign a Brazilian Rainbow Six Siege team and a Thai FIFA Online and PUBG Mobile team, signaling their intent to expand further internationally in the future ("History").

Controversy

In the past few years, FaZe has made the news several times for controversies both involving its members and the organization itself. In 2019, FaZe Jarvis, one of the organization's most popular Fortnite players, admitted to using aimbot while making content for his YouTube channel (Giuliani). Aimbot is a cheating mechanism that allows players to hit their targets no matter their quality of aim. Jarvis was subsequently banned from Fortnite by Epic Games because of the violation of their terms of service (Giuliani).

Then, another Fortnite player, Tfue, sued FaZe Clan for having him sign a predatory contract that claimed 80% of his earnings (Cullins). Though he has amassed millions of followers independent of his relationship with FaZe, FaZe still claimed his earnings from brand deals, esports winnings, and ad revenue (Cullins). In 2020, the lawsuit was finally settled, not clarifying the terms of the settlement (Alexander).

Most recently, FaZe Jarvis has again been the center of a scandal, this time involving a 2021 cryptocurrency charity initiative in which Jarvis and other members created a cryptocurrency called "Save the Kids" and agreed to donate a minimal portion of profits to charity (Giuliani). A fellow YouTuber exposed Jarvis and other FaZe members for creating a "pump and dump scheme," convincing fans to spend money on Save the Kids coins, selling their coins, and tanking the coins' value (Asarch). In response, FaZe suspended the members involved and condemned their actions (Asarch).

-A.C., Spring 2022

References

"About Us - History of FaZe Clan®." *FaZe Clan® Official*, https://fazeclan.com/about/.

Alexander, Julia. "Tfue Settles Lawsuit against Faze Clan Over 'Oppressive' Gaming Contract." *The Verge*, The Verge, 26 Aug. 2020, https://www.theverge.com/2020/8/26/21403052/tfue-faze-clan-lawsuit-settled-streaming-events-competition-esports.

Asarch, Steven. "FaZe Clan Members Suspended Following Allegations That Their Save the Kids Cryptocurrency May Have Been a Scam." *Insider*, Insider, 2 July 2021, https://www.insider.com/faze-clan-save-the-kids-cryptocurrency-scam-controversy-2021-7.

Birnbaum, Justin. "FaZe Clan Announces SPAC Merger, Becoming the First Esports Company to Hit $1 Billion Valuation." *Forbes*, Forbes Magazine, 21 Apr. 2022, https://www.forbes.com/sites/justinbirnbaum/2021/10/25/faze-clan-announces-spac-merger-becoming-the-first-esports-company-to-hit-1-billion-valuation/?sh=30181b9e220f.

Christina, Tammy. "Why Is The World So Invested In This Gaming Crew?" *GQ*, 8 Sept. 2020, https://www.gq.com.au/entertainment/tech/why-is-the-world-so-invested-in-this-gaming-crew/image-gallery/df9476fbb1a315eed1e509490b4ca5fb.

Cullins, Ashley. "Esports pro Sues Gaming Organization Faze Clan over 'Oppressive' Contract." *The Hollywood Reporter*, The Hollywood Reporter, 21 May 2019, https://www.hollywoodreporter.com/business/business-news/tfue-sues-faze-clan-oppressive-contract-1212124/.

"FaZe Clan® Official Teams." *FaZe Clan® Official*, https://fazeclan.com/teams.

"History of FaZe Clan®." *FaZe Clan® Official*, https://fazeclan.com/history.

Jiuliani, Joey. "Things Are Quickly Getting Worse for FaZe Clan." *SVG.com*, SVG, 7 July 2021, https://www.svg.com/454754/things-are-quickly-getting-worse-for-faze-clan/.

Lee Trink - Chief Executive Officer - Faze Clan | Linkedin. https://www.linkedin.com/in/lee-trink-7a142522.

Lorenz, Taylor. "Can Faze Clan Build a Billion-Dollar Business?" *The New York Times*, The New York Times, 15 Nov. 2019, https://www.nytimes.com/2019/11/15/style/faze-clan-house.html.

Raga, Pippa. "Faze Ewok Used National Coming Out Day to Make an Important Announcement." *Distractify*, Distractify, 13 Oct. 2020, https://www.distractify.com/p/faze-ewok-gender.

Team, The G FUEL. "FaZe Clan History, Logo, Owners, Members, Rosters, House and More!" *FaZe Clan History, Logo, Owners, Members, Rosters, House And More!*, https://blog.gfuel.com/faze-clan#owners-ceo-president.

Fighting Game Community

Overview

The Fighting Game Community, or FGC, is the community of gamers who play, compete in, and commentate on fighting games. Starting in the US with the game *Street Fighter II* in the early 1990s, and then expanding abroad with games such as *Tekken* (1994) in Korea and *King of Fighters* (1994) in Latin America, the FGC has been a staple in competitive gaming since its emergence. According to academic scholars, the key traits of the FGC are their emphasis on social play and interaction (Harper 2010). Furthermore, the community is racially diverse, but is almost entirely male, which has led to several issues regarding gender imbalance (Plante 2014). Being a separate entity from esports, the FGC prides itself on its accessibility, allowing for players of all experience levels to take part, this being the community's grassroots ideals. Conversely, this sticking to the grassroots has prevented the FGC from achieving mainstream esport success compared to communities for games like *League of Legends* and *DOTA 2*. However, gaming companies are slowly beginning to realize the potential for profit through the FGC. Companies such as Sony and Capcom have begun sponsoring tournaments, rather than taking full control (Cuevo 2019).

From the Arcade to EVO

The beginning of the FGC can be traced back to the arcade in the 1990s starting with the game *Street Fighter II* in the US. Released by Capcom in 1991, *Street Fighter II* is considered to be the first true fighting game due to its content as well as its strong arcade presence and the depth of gameplay, which included the ability to create combos and the game's emphasis on strategy, something never before seen in the genre. With this style of gameplay, Capcom produced a game that facilitated competitive play, growth, and a place where players could discuss and share insight about the game, creating a passionate community solely centered around *Street Fighter II* (Lo 2001). This appeal, in turn, created a subculture that challenged players to put in the time to get better at fighting games known as the underground arcade gaming scene, the place where the grassroots of the FGC were instilled (Rodriguez 2021).

In the mid-1990s to early 2000s arcades in NYC and Southern California were at the forefront of this competitive gaming movement. Arcades hosted tournaments for established games such as *Street Fighter* and *Mortal Kombat*; however, during this time the use of the internet was becoming more standardized. The internet forum Shoryuken.com acted as a hub for all fighting games, where games could be discussed and where tournaments could be organized, specifically the Evolution Championship Series, or EVO, a showcase for fighting game talent. (Learned 2017). Although centered in the US, EVO gained the global attention of fighting game fans, with players coming from countries such as Japan and Korea. Moreover, these countries had their own pockets of communities that developed similarly to the US for games such as *Tekken* and *Street Fighter.* With arcade hardware becoming harder to come by, EVO shifted to consoles for its 2004 tournament (Kleckner 2004). Although this shift was subject to controversy, the tournament was still able to capture the feel of the arcade without the use of cabinets. Furthermore, the move to consoles allowed for widespread accessibility, which allowed for the community to grow (Harper 2010).

Online Gaming

With the emergence of console gaming came the capability to play online. Online play offered the ability to fight against different opponents through the internet without being confined to a physical location. The general sentiments going through the FGC are that the "limitations of online play hold it back, but it's better than nothing" one of the main points being that playing online is good for learning but not for competition (Harper 2010). Since internet connections can be unstable at points, the delay-based netcode used in most fighting games caused them to be nearly unplayable online for people without fast internet connections (Maldonado 2020).

The COVID-19 pandemic disrupted the way the FGC functioned drastically causing tournaments such as EVO to temporarily shift to a fully online format, even though most games were not equipped for online competitive play. A solution to this issue that the community advocates for is called rollback netcode, netcode that would create a seamless experience similar to offline gameplay (Maldonado 2020). Developers are taking note of this shift to online play, and are changing accordingly. Studios like Arc System Works retroactively added rollback to older titles with the games Guilty Gear XX Accent Core Plus R and Blazblue Centralfiction. This shows that by catering to the current need of the FGC, developers are able to increase the longevity of their games, while in turn widening the scope of the community by enabling stable online play (Adlan 2022).

Culture and Demographics

The FGC is often described as colorblind due to its racial diversity. A key aspect of the community is its openness to all fighting game players. However, the community is overwhelmingly male and is very unwelcoming towards women (Plante 2014). This gender imbalance often prompts sexual harassment, with some players even referring to it as a part of the culture (Johnston 2014). Moreover, sexual misconduct allegations against EVO co-founder Joey Cuellar prompted the EVO online 2020 to be canceled due to game studios pulling out of the tournament as a sign of support to victims of abuse. Since then, the community has made strides to better gender relations, implementing a code of conduct to make the community safer and welcoming, as well as being a resource to help members take action against abuse and misconduct in the scene (Kim 2021).

Importance of Broadcasting and Sponsorships

Broadcasting has allowed the FGC to gain a broader appeal. With the innovation of video capture and user-generated content, players are now able to record matches and post them on platforms such as YouTube for the world to see (Taylor 2018). Correspondingly, the advent of Twitch caused the FGC to take a new form. The ability to live-stream content created a new way for members of the community to interact with each other. Through Twitch "new communities of practice [emerged]…particularly with the roles of mentorship and apprenticeship" where players could take part in discussing and learning games through a livestream, mimicking the social environment of the arcade. (Johnson and Woodcock 2017). Additionally, Twitch has allowed tournaments to be broadcast all over the world, with EVO generating 5.73 million watch hours worldwide in 2019 (Miceli 2019).

The FGC has risen in popularity significantly due to the proliferation of broadcast content; however, because of the community's grassroots, it tends to miss out on larger prize pools and sponsorships. Nonetheless, game companies have noticed the uptick in popularity and have started to see the potential for profit within the FGC (Toms 2019). Companies such as Capcom have recognized the importance of grassroots and have sponsored a tournament, the Capcom Pro Tour, that follows the precedents set by the community, giving the FGC autonomy over its competitions (Cuevo 2019). Moreover, Sony's acquisition of EVO has given the community the means to launch into the mainstream, without distancing itself from its foundation (Ferguson 2021).

-E.P., Spring 2022

References

Adlan, Amirul. 2022. "Rollback Netcode: Why Fixing Fighting Games Seems To Be So Controversial." GamerBraves. https://www.gamerbraves.com/rollback-netcode-why-fixing-fighting-games-seems-to-be-so-cont roversial/.

Cuevo, Chris. 2019. "FGC Caster James Chen on Preserving Grassroots Culture in FGC, Favorite Moments, and Inclusion in the FGC." Inven Global. https://www.invenglobal.com/articles/8383/fgc-caster-james-chen-on-preserving-grassroots-culture-in-fgc-favorite-moments-and-inclusion-in-the-fgc

Ferguson, Liam. 2021. "Why Sony Buying Evo Isn't A Cause For Concern." Game Rant. https://gamerant.com/sony-evo-buy-why/.

Harper, Todd L. 2010. "The Art of War: Fighting Games, Performativity, and Social Game Play." Order No. 3433972, Ohio University. http://proxy.library.nyu.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fdissertations-theses%2Fart-war-fighting-games-performativity-social-game%2Fdocview%2F839811870%2Fse-2%3Faccountid%3D12768

Johnson, Mark R., and Jamie Woodcock. 2017 "Fighting games and go: exploring the aesthetics of play in professional gaming." Thesis Eleven 138, no. 1 26-45.

Johnston, Casey. 2014. "Women are gamers, but largely absent from "e-sports."" Ars Technica. https://arstechnica.com/gaming/2014/02/women-are-gamers-but-largely-absent-from-e-sports/

Kim, Matt. 2021. "Fighting Game Community Organizers Introduce Code of Conduct to Combat Harassment, Abuse." IGN. https://www.ign.com/articles/fighting-game-community-code-of-conduct-super-smash-bros-evo

Kleckner, Stephen. 2004. "Spotlight on the Evolution 2K4 Fighting Game Tournament." GameSpot. https://www.gamespot.com/articles/spotlight-on-the-evolution-2k4-fighting-game-tournament/1100-6103845/

Learned, John. 2017. "The Oral History of EVO: The Story of the World's Largest Fighting Game Tournament." USgamer. https://www.usgamer.net/articles/the-oral-history-of-evo

Lo, Vincent. 2001 "The Rise and Fall of Street Fighter II." Stanford. https://web.archive.org/web/20210510034935/http://web.stanford.edu/group/htgg/cgi-bin/drupal/sites/default/files2/vlo_2001_2.pdf

Maldonado, Lawrence. 2020. “Why Proper Rollback Netcode Is So Important For Fighting Games.” Screen Rant. https://screenrant.com/fighting-game-rollback-netcode-explained-online-input-lag/

Miceli, Max. 2019. “Super Smash Bros. Ultimate Stands Out as Most-Watched Game in Evo Debut on Twitch.” The Esports Observer. https://archive.esportsobserver.com/evo2019-twitch-viewership/

Plante, Chris. 2014. “Why the fighting game community is color blind.” Polygon. https://www.polygon.com/features/2014/2/6/5361004/fighting-game-diversity

Rodriguez, Eric. 2021 “How Fiercely Competitive Arcade Gamers Paved the Way for Esports.” LX. https://www.lx.com/science-tech/how-fiercely-competitive-arcade-gamers-paved-the-way-for-es ports/44559/.

Taylor, T. L. 2018. “Esports Broadcasting: DITCHING THE TV DREAM.” In Watch Me Play: Twitch and the Rise of Game Live Streaming, 136–211. Princeton University Press, https://doi.org/10.2307/j.ctvc77jqw.8.

Toms, Chelly. 2019. “The growth of the FGC - Watering the grassroots.” Esports Insider. https://esportsinsider.com/2019/05/the-growth-of-the-fgc-watering-the-grassroots/.

Flash Games

Overview

Flash games are games that were accessed on web browsers created using Adobe Flash (Frey and Merkas, n.d.). They existed from around the release of Flash in 1996 to the program's eventual termination at the end of 2020 (Hà Nguyễn, 2024). Flash games became popular primarily due to their accessibility and because they were largely free-to-play (Hà Nguyễn, 2024). They helped pioneer a landscape of independent developers (Richner, n.d) and set much of the framework for the casual (Lawhead, 2020) and mobile gaming spaces today (Hà Nguyễn, 2024). They were predominantly found on portals like Newgrounds that housed countless Flash games accessible with just a click (Hà Nguyễn, 2024). While Flash was discontinued, many games originally released as Flash games were preserved and can still be played through the use of emulators and modern remakes (Flash Games, 2020).

Origins of Flash and Early Flash Games

SmartSketch, what would be the initial precursor to Adobe Flash, was released as FutureWave's first product after launching in 1993 (Gay, 2006a). Originally built as a drawing software for a failed pen computing device, the creators pivoted to transform it into an animation program geared towards sending graphics via the internet and released it as FutureSplash Animator (Gay, 2006b). The software became a useful tool for creating "TV-like" graphics for the internet and was even used by Microsoft and Disney. Following this success, Macromedia acquired FutureWave in 1996 and renamed the program to Macromedia Flash 1.0. In the years to follow, Flash's potential as an incredibly versatile software was realized, particularly with the release of Flash 5, which introduced ActionScript 1.0, a programming language that would allow for the implementation of much more dynamic and complex interactions (Salter and Murray 2014, 6). Macromedia would eventually be acquired by Adobe in 2005, and Macromedia Flash would be renamed to Adobe Flash.

Even before ActionScript was introduced to Flash people were pushing the limits of what was possible with the platform. One big way this was occurring was in the creation of games. While it's extremely hard to pinpoint the first Flash game, one of the first ones was Pico's School, which was released in 1999 and served as a notable landmark in Flash gaming. It was understood to be the first Flash game to get some form of mainstream success (Museum of Screens, 2023) and "exhibited a complexity of design and polish in presentation that was virtually unseen in amateur Flash game development." (Williams 2017, 219) The creator, Tom Fulps, released the game on his media hosting platform, Newgrounds, helping launch the success of the site as a hub for games and art. Newgrounds was the first and one of the biggest automated portals for Flash games, allowing users to submit games to be hosted so users across the world could engage with them (Richner, n.d). Newgrounds and other portals like it created the space for Flash games to be shared, played, monetized, and discovered.

A major contributor to the rise in popularity of Flash games is how accessible they were both to make and play (Flash Games, 2020). Flash's "design-centric workflow" allowed artists who may not be familiar with programming to transform their art into games (Richner, n.d). At the same

time, platforms like Newgrounds allowed artists to easily publish their games. Because these games were largely free to play (Hà Nguyễn, 2024) and didn't require any additional equipment or downloads (Richner, n.d), they were very accessible and able to amass an audience of more casual gamers.

The Flash Era

The accessibility of Flash game creation allowed for a lot of experimentation and genre exploration not commonly found elsewhere in the gaming industry. A wide range of genres were popular among Flash games, including action role-playing, adventure, puzzles, and countless more. However, what remains the most popular Flash game on Newgrounds today, with nearly 50 million views, is *SIMGIRLS,* an erotic dating simulator released in 2002 (Newgrounds, 2002b). Flash games as a form of erotic media became an extremely popular genre with a variety of premises. The popularity and sheer volume of erotic Flash games speak to the limited to nonexistent regulations placed both on Flash as a platform and communities such as Newgrounds (Salter and Murray 2014, 83). This same lack of restrictions has been present since the beginning of Flash games and their publishing, as can be seen in the violence and graphic nature of Fulp's *Pico's School.*

The way in which Flash games were shared was inherently social as users were able to not only play the games uploaded by others but also offer critiques and suggestions (Salter and Murray 2014, 75). However, the social aspects of Flash games were not limited to the space surrounding the games, but rather, socialization began to be integrated into the games themselves. *Farmville* was a farming simulator launched on Facebook in 2009 and is considered a social game. While being described as laborious and repetitive, the game was able to gain popularity due to the implementation of social features (Salter and Murray 2014, 84), creating a sense of community. *Farmville* was by no means the only Flash-based social game, as the platform's ability to integrate closely with social network APIs made it well-suited to the genre (Salter and Murray 2014, 84).

As Flash games got more traction, the question of how to monetize them arose. Portals like Newgrounds eventually began hosting advertisements to support the bandwidth required to host games (Salter and Murray 2014, 67). While this revenue could be shared with developers, it was not the most lucrative option. Instead, developers relied on sponsorships in which companies would pay to have their branding featured in the game, to host the game exclusively on their site (McCollum, 2024), or to acquire the source files (Lawhead, 2020). An environment was created where, even within a highly saturated Flash game market, many independent developers were able to make money off of their work (Lawhead, 2020).

The Death of Flash

By the early 2010s, Flash had begun to decline because of the rise of competing technologies such as HTML5 and mobile gaming (Latimore, 2018). Flash was also a significant security threat and left users vulnerable to cyberattacks (Checkmarx, n.d.). Due to these security threats, in 2010, Apple CEO Steve Jobs released an open letter titled "Thoughts on Flash" in which he explained why Flash would not be allowed on Apple's platform (Richner, n.d). As browsers began to phase out Flash, Adobe announced in 2017 that Flash Player support would end by

2021 (McCollum, 2024). Many portals closed or went under following the death of the Flash player. A small number were able to remain active by transitioning to alternative software or emulators (Konvoy, 2025).

What Remains Today

While a considerable portion of games got lost with the death of the Flash player and subsequent shutdown of many hosting portals, many original games have been preserved. Emulators like Ruffle allow users to play Flash games in modern browsers without the original Flash plugin (Hà Nguyễn, 2024). Other Flash games have been recreated with modern web technologies, like HTML5, that are compatible with today's browsers (Hà Nguyễn, 2024).

The influence of Flash games remains visible across indie, casual, and free-to-play games today. Flash's accessibility as a tool for creating games allowed for incredible experimentation that has helped pave the way for a lot of independent development today.

M.B., Fall 2025

Bibliography

Checkmarx. n.d. "Flash Security - Checkmarx." *Checkmarx*. https://checkmarx.com/glossary/how-to-maintain-proper-securityagainst-Flash-vulnerabilities/.

Flash Games. 2020. "Flash Games". http://Flash-games.io/.

Frey, Alexander, and Nikola Merkas. n.d. "Flash Games: Definition and Notable Examples." *Studiomerkas.* https://www.studiomerkas.com/en/blog/Flash-games-definition-and-notable-examples.

Gay, John. 2006a. "Macromedia - Showcase: History of Flash." *Adobe*. https://web.archive.org/web/20150101204138/https://www.adobe.com/macromedia/events/john_gay/page03.html.

———. 2006b. "Macromedia - Showcase: The Dawn of Web Animation." *Adobe*. https://web.archive.org/web/20060529171057/http://www.adobe.com/macromedia/events/john_gay/page04.html.

Hà Nguyễn, Phương. 2024. "What Is a Flash Game? All Things You Need to Know." *Ant.Games*. https://ant.games/blog/wiki/Flash-game/.

Konvoy. 2025. "What Are Flash Games? Will They Still Exist in 2025?" *Konvoy.vc*. https://www.konvoy.vc/blogs/what-are-Flash-games.

Latimore, Ben. 2018. "Adobe Flash's Gaming Legacy — Thousands upon Thousands of Titles — and My Efforts to Save It." *Medium*. https://medium.com/@bluemaximax011/adobe-Flashs-gaming-legacy-thousands-upon-thousands-of-titles-and-my-efforts-to-save-it-58c14811558a.

Lawhead, Nathalie. 2020. "The Flash Game Movement, My Early Flash Work, and How Flash Games Informed What We Have in Indie Games Today… – the Candybox Blog." *Nathalie Lawhead.* https://www.nathalielawhead.com/candybox/the-Flash-game-movement-my-early-Flash-work-and-how-Flash-games-informed-what-we-have-in-indie-games-today.

McCollum, Jason. 2024. "Game Development in the Dying Days of Flash." *The Shaggy Dev*. https://shaggydev.com/2024/05/15/Flash-development/.

Museum of Screens. 2023. "What Was the First Flash Game?" *Museum of Screens*. https://museumofscreens.wordpress.com/2023/04/30/what-was-the-first-Flash-game/.

Newgrounds. 2002a. “Alien Hominid.” *Newgrounds.com*. https://www.newgrounds.com/portal/view/59593.

———. 2002b. “SIMGIRLS Version 6.6.” *Newgrounds.com*. https://www.newgrounds.com/portal/view/50364.

Richner, Jonas. n.d. “How Flash Games Shaped the Video Game Industry.” Flashgamehistory.com. https://www.Flashgamehistory.com/.

Salter, Anastasia, and John Murray. 2014. *Flash: Building the Interactive Web*. Cambridge, Massachusetts: The Mit Press.

Williams, Andrew. 2017. *History of Digital Games: Developments in Art, Design and Interaction*. Boca Raton, FL: CRC Press.

Flipline Studios

Overview

Flipline Studios is an American-based web and mobile game development company that is headquartered in Cleveland, Ohio. Flipline Studios was founded in 2004 by Matt Neff and Tony Solary who have both remained the company's owners since its inception. Neff and Solary have also persisted as the only two employees of the company (Neff, Matt, and Tony Solary). Flipline Studios is best known for its *Papa Louie* work simulator series which has expanded through multiple platforms: web-based, mobile, and PC. The series follows the player's journey to building a restaurant and each game centers around a different food item or cuisine.They have also developed multiple MMOs (Massively Multiplayer Online games), platformers, and strategy-based puzzle Flash games. Flipline Studios used to be primarily based on creating Flash games but currently gets a majority of their revenue through their mobile games, they have also recently opened a new revenue stream via Steam and PC gaming.

Founding

Flipline Studios was originally founded as Flipline IDS (Interactive Design Studio), and their main focus was on creating digital cartoon series for children. After two years of working on the development stage of a cartoon series entitled *Freezing Pointe*, Neff, and Solary decided to pivot to creating Adobe Flash games in 2006. When asked about the direction of the company, Solary stated *"*...we're trying to make the turn to just gaming,"(Feran, Tom). Thus the company was renamed and Flipline Studios was solidified as a game development company. The *Papa Louie* franchise started, however, with a platformer released in 2006 entitled *Papa Louie: When Pizzas Attack*, Flipline Studios would later release two more *Papa Louie* platformers. This initial release was followed by *Papa's Pizzeria* in 2007, the first of their popular time-management restaurant games accessible via internet browser.

Flash Franchise

After the release and small success of their first two games, Flipline Studios decided to continue to create games using Flash. In 2008, Flipline Studios released their largest game: *Remnants of Skystone* which was an MMO developed for the Adobe Flash game host site, Kongregate. The game's server was closed in 2014 but it had a small, devoted fanbase. The funding for this game came through a grant from Kongregate as well, who at the time was looking to invest in indie developers working in Adobe Flash due to the seemingly boundless creativity that the software provided (Alexander, Leigh). After growing their relationship with Kongregate, Flipline Studios began to have their games hosted on other Flash sites which generated revenue through advertisements and licensing fees (Takahashi, Dean).

Due to the popularity of their Papa Louie series, they continued on a steady release that amassed 14 different Flash games. Each new game was simply an aesthetic swap to a different cuisine with a new storyline using all of the same mechanisms, item shop, and characters. In 2014, due to the success of their mobile gaming and the decline in interest in Flash games, Flipline Studios uploaded all of their Flash games as free to download for game host sites, thus marking the end of Flipline's monetization of their Flash games. However, they continued to develop Flash

games until the announcement of its removal by Adobe in 2017, their last Flash release was in 2018 with *Papa's Scooperia*.

Expansion to Mobile and Tablet

In 2012, Flipline Studios expanded their market by porting (the process of taking a game made for a specific platform and transferring it to another) their already successful *Papa's* series onto the mobile market. They released *Papa's Burgeria HD* for the iPad that year, and a few months later re-released the game for all mobile devices. Over a decade, Flipline was able to port all 14 games into their mobile series. Their mobile series consists of both *Papa's To Go* and *Papa's HD* games (the former for mobile phones, and the latter for tablets). Flipline Studios has yet to re-platform any of its games outside of the *Papa Louie* series.

These games continue to garner thousands of downloads weekly, yet most haven't been updated since their initial upload to their respective app store ("Flipline Studios Revenue"). As recently as 2022, Flipline Studios was able to maintain a number one spot on the iOS app store's paid games section. They have also had multiple games be awarded placement in the App Store Awards ("Get the Top Games of 2021"). All of Flipline Studios's 57 mobile releases (30 on the iOS app store and 27 on the Andriod app store) are paid except one, *Papa Louie's Pals,* and all follow the model of one-time purchase, no advertisements, and no additional downloadable content. All of the paid games range in price from one to five dollars. This relatively cheap access point and reliable gameplay have led to Flipline Studios garnering a rather large mobile audience. Holistically, the apps continue to bring in over one hundred thousand dollars monthly and are currently the main source of Flipline Studios's revenue ("Flipline Studios Revenue").

Flash Shutdown

In 2017, Adobe announced that they would be shutting down their animation software program/game engine Adobe Flash. Flipline Studios stopped developing Flash Games in mid-2018 after the initial announcement in 2017, pivoting their focus to their mobile and tablet games (Neff, Matt, and Tony Solary.). In late 2020, the Adobe Flash player plugin was officially removed and subsequently, all games using Flash were rendered unplayable online. During this same month, Flipline Studios announced *Papa's Mocharia To Go!* which would be the first game in the series to be exclusively an app without a prior desktop version. This announcement serves as the beginning of Flipline's sole focus on mobile/tablet gaming.

In the course of Adobe Flash being removed, downloadable Flash game emulators quickly became popular and these emulators were mostly comprised of open-source content (Moss, Richard C). Flipline Studios's games were among some of the open-source content used for these emulators. Due to player's lack of access to their game cataloge through means other than emulators, Flipline Studios was unable to gain any revenue from their web-based games for three years. With the rise in PC gaming audiences since their original platform shift in 2014, Flipline Studios began to appeal to the idea of re-entering the world of computer-based gaming.

Flipline Today

After finding a new stream of revenue through their ported mobile games and needing a way to get their web games back to their former audience, Flipline Studios decided to expand into PC gaming. In February of 2023, Flipline Studios announced on their blog that they would be releasing their first game available for purchase through Steam for roughly six dollars, Papa's Freezeria Deluxe (Neff, Matt, and Tony Solary). The game was later released in March of 2023. The game's economic model is a one-time purchase, there is no downloadable content. With over one hundred thousand downloads, they have made roughly over six hundred thousand dollars through this release alone ("Flipline Studios Revenue"). Currently, only one game has been released by Flipline Studios on Steam. Due to the success of this initial release, it's safe to assume that Flipline Studios may continue to develop ports of their already existing games for PC in the future.

However, their main focus stays on mobile gaming. In October of 2023, another blog post announced *Papa's Paleteria To Go!* which is the 17th game of the series and the 3rd game to be only based on the mobile platform, and not an existing web game port. Both Neff and Solary continue to regularly communicate updates and news through the Flipline Studios blog that connects them to their loyal fanbase.

-F.R., Fall 2023

References

Alexander, Leigh. "Q&A: Kongregate Announces Indie Funding, Talks Innovation." Game Developer, November 13, 2007. https://www.gamedeveloper.com/pc/q-a-kongregate-announces-indie-funding-talks-innovation#close-modal.

"Get the Top Games of 2021: App Store Story." App Store, November 24, 2021. https://apps.apple.com/story/id1594410402/.

Feran, Tom. "Hobby Is Paying Off for Makers of Games." The Plain Dealer, 2007. https://www.proquest.com/docview/292432225/F5D99E03C5C94B0APQ/33?parentSessionId=sqIA933WaXgiTfNMiQwvuLm2YmgWoGIWunzeO9VSdHg%3D.

"Flipline Studios Revenue & App Download Estimates from Sensor Tower - Apple App Store," n.d. https://app.sensortower.com/ios/publisher/flipline-studios/514634238.

Graft, Kris. "Kongregate: Devs Making Money, Revs Rising 30% Each Month." Game Developer, March 23, 2010. https://www.gamedeveloper.com/pc/kongregate-devs-making-money-revs-rising-30-each-month.

Moss, Richard C. "The Rise and Fall of Adobe Flash." Ars Technica, July 7, 2020. https://arstechnica.com/information-technology/2020/07/the-rise-and-fall-of-adobe-flash/.

Neff, Matt, and Tony Solary. "Flipline Studios Blog." Flipline Studios Blog RSS. https://www.flipline.com/blog/.

Takahashi, Dean. "Thousands of Flash Game Developers Make More than $1,000 a Month." VentureBeat, December 8, 2009. https://venturebeat.com/business/thousands-of-flash-game-makers-make-more-than-1000-a-month/

TV Tropes. "Video Game / Remnants of Skystone," n.d. https://tvtropes.org/pmwiki/pmwiki.php/VideoGame/RemnantsOfSkystone.

Frame Generation

Overview

Frame generation is an AI-driven technology that makes games appear smoother by inserting extra frames between the ones already rendered by the graphics card. It evolved from motion interpolation in video playback, animation, and VFX, and was first commercially realized by graphics hardware company NVIDIA in 2022, with its introduction of DLSS frame generation (McLoughlin 2025).

Currently, the technology is implemented by multiple hardware vendors, including NVIDIA, AMD, and Intel, but is limited to systems equipped with newer graphics cards from the vendors and a growing roster of supported game titles such as *Cyberpunk 2077* and *Alan Wake 2* (Lin and Burnes 2022). In these titles, frame generation helps maintain smoother motion and higher perceived frame rates during graphically intensive scenes, improving overall responsiveness and visual stability.

In its current use, frame generation represents a shift in how visual performance is achieved: rather than increasing raw computational power, it uses machine learning and motion analysis to enhance perceived smoothness, signaling a broader transition toward AI-assisted rendering pipelines in real-time graphics.

Development

The concept of generating additional frames between rendered ones is not new. It has long existed in video playback and animation as motion interpolation, also called "motion smoothing" (Cornish 2019). While effective for prerecorded video, this technology was too computationally expensive for real-time use in games.

By the late 2010s, advances in GPU technology made real-time motion prediction increasingly feasible (Briedis et al. 2021). At the same time, the growing use of ray tracing in games placed heavy demands on rendering pipelines, pushing frame rates below acceptable levels and creating pressure for new performance solutions (Edser 2025). Together, these factors pushed hardware manufacturers to explore frame interpolation as a viable tool for real-time rendering.

NVIDIA laid important groundwork with the release of DLSS 1 in 2018 and DLSS 2 in 2020. DLSS, short for Deep Learning Super Sampling, was initially a super-resolution technology that upscales lower-resolution images. Although neither version generated new frames, they introduced neural-network–based upscaling and motion-vector pipelines, which together provided the technical foundation for frame generation (Alarcon 2018; Burnes 2020).

In 2022, NVIDIA introduced DLSS 3, the first consumer frame generation technology capable of generating intermediate frames during gameplay. At launch, DLSS 3 was supported by more than 35 titles and apps, including *A Plague Tale: Requiem*, *Cyberpunk 2077*, and *Microsoft Flight Simulator* (Lin and Burnes 2022). Its introduction signaled frame generation's transition from experimental research to a practical feature in mainstream PC graphics.

After DLSS 3's introduction, competing hardware manufacturers began developing their own frame-generation systems. AMD's earliest attempt appeared in 2023 with Fluid Motion Frames and FidelityFX Super Resolution 3 (FSR 3), which integrated frame generation directly into supported titles and emphasized broad hardware compatibility (McLoughlin 2025). Intel entered the space shortly afterward with updates to its XeSS ecosystem, adding frame-generation capabilities tailored to its Arc GPUs (Intel Gaming 2024).

Mechanics

Frame generation functions by analyzing consecutive rendered frames and predicting the intermediate visual states between them. Using motion vectors, data that describe how pixels and objects move from one frame to the next, the GPU estimates trajectories and reconstructs the scene's expected motion over time (McLoughlin 2025). This information, combined with depth and color data from the rendering pipeline, allows the system to synthesize an interpolated frame that aligns with both the preceding and subsequent images (Briedis et al. 2021). In simplified terms, the GPU "makes an educated guess at what the next frame should look like in near real time based on the previous frame and some motion vectors provided by the game engine" (Linus Tech Tips 2022).

These predictions are often refined using optical-flow analysis, a technique that estimates how each pixel moves between frames by examining changes in color and position. This allows the system to track motion more precisely, especially in scenes with complex lighting changes (Lin and Burnes 2022). Some implementations also employ neural-network inference, which has been trained on large datasets to recognize patterns such as how objects deform and how shadows shift. By combining these cues, the GPU can generate an intermediate frame that looks consistent (Corsair 2025).

Adoption in Game Titles and Game Engines

Since its introduction in consumer hardware, frame generation has expanded across the PC game market, though adoption varies widely depending on hardware ecosystems and engine compatibility. NVIDIA's DLSS Frame Generation remains the most widely implemented system. As of 2025, more than 150 games support DLSS 3, including high-profile releases such as *Cyberpunk 2077, Alan Wake 2, Microsoft Flight Simulator,* and *Forza Motorsport (2023)* (McLoughlin 2025). DLSS 3 is only officially available for NVIDIA's RTX 40 and 50 series GPUs, meaning only players with those GPUs are able to play supported games with DLSS 3. In January 2025, NVIDIA introduced DLSS 4 exclusively for its GeForce RTX 50 Series GPUs, adding Multi Frame Generation and launching with support for over 75 games and applications. Early titles included *God of War Ragnarök, Diablo IV*, and *The Finals,* which used the technology to stabilize performance at high resolutions and with ray tracing enabled (Burnes 2025).

AMD's FidelityFX Super Resolution (FSR) and its frame-generation extensions are designed to run across a broad range of GPUs, including older AMD cards and, in many cases, competing hardware, which has encouraged integration in studios seeking wide accessibility. FSR 3 supports about 76 games; some examples include *Cyberpunk 2077, Starfield*, and *Hogwarts*

Legacy. FSR 4, the newest version of FSR, currently supports nearly 40 games, including *Call of Duty: Black Ops 6, FragPunk, Civilization 7,* and *Marvel's Spider-Man 2* (McLoughlin 2025).

Critical Reception and Limitations

Frame generation has been received with a mix of enthusiasm and caution among reviewers, analysts, and players. Technology outlets praised its ability to dramatically increase perceived smoothness in visually demanding titles, often turning unstable 40–60 fps performance into motion that appears closer to 80–120 fps (Digital Foundry 2025). In early implementations, including *Marvel's Spider-Man Remastered* and *F1 22*, reviewers found that frame generation could substantially improve playability in scenes that were previously bottlenecked by ray tracing or CPU-bound workloads (Linus Tech Tips 2022).

Meanwhile, critics emphasized that the technique introduces new visual and mechanical trade-offs. Hands-on testing by Linus Tech Tips documented a range of artifacts, including ghosting halos, flickering UI elements, and intermittent frame "breakdown" during sudden scene changes. This is because the system must predict motion rather than fully render it, leaving it vulnerable to errors. Input latency is another recurring concern: although latency increases by only a few milliseconds in many cases, this can be noticeable in fast-paced games (Linus Tech Tips 2022).

Community response has reflected these mixed findings. On Reddit's r/pcgaming and r/nvidia forums, many players view frame generation as a practical enhancement for single-player titles, open-world games, and simulation genres, where visual fluidity matters more than reaction time. Conversely, competitive-gaming communities generally advise disabling frame generation in shooters such as *Counter-Strike 2* or *The Finals*, where even small increases in latency affect performance ("R/Nvidia, My Experience with Frame Generation, as the Average Consumer." n.d.). Some commentators have also raised broader concerns about the growing reliance on "fake frames," arguing that the technology may allow poorly optimized games to rely on reconstruction techniques rather than improving native performance (McLoughlin 2025). Despite these critiques, frame generation is widely regarded as a meaningful advancement in real-time rendering, particularly for high-fidelity titles that would otherwise struggle to maintain stable frame rates with features like ray tracing enabled.

- L.W., Fall 2025

References

Alarcon, Nefi. 2018. "DLSS: What Does It Mean for Game Developers?" NVIDIA Technical Blog. September 19, 2018. https://developer.nvidia.com/blog/dlss-what-does-it-mean-for-game-developers/.

Briedis, Karlis Martins, Abdelaziz Djelouah, Mark Meyer, Ian McGonigal, Markus Gross, and Christopher Schroers. 2021. "Neural Frame Interpolation for Rendered Content." *ACM Transactions on Graphics* 40 (6): 1–13. https://doi.org/10.1145/3478513.3480553.

Burnes, Andrew. 2020. "NVIDIA DLSS 2.0: A Big Leap in AI Rendering." Www.nvidia.com. March 23, 2020. https://www.nvidia.com/en-us/geforce/news/nvidia-dlss-2-0-a-big-leap-in-ai-rendering/.

———. 2022. "GeForce News: NVIDIA DLSS 3." NVIDIA GeForce News. 2022. https://www.nvidia.com/en-us/geforce/news/dlss3-supports-over-35-games-apps/.

———. 2025. “DLSS 4 with Multi Frame Generation & Enhancements for All DLSS Technologies Available Now in over 75 Games and Apps.” NVIDIA. 2025. https://www.nvidia.com/en-us/geforce/news/dlss-4-multi-frame-generation-out-now/.

Cornish, Audie. 2019. “‘Motion Smoothing’ Makes Films Look Different on Your TV and Hollywood Is Not Happy.” NPR. July 29, 2019. https://www.npr.org/2019/07/29/746365954/motion-smoothing-makes-films-look-different-on-your-tv-and-hollywood-is-not-happ.

Corsair. 2025. “What Is DLSS Multi Frame Generation?” Corsair.com. January 22, 2025. https://www.corsair.com/us/en/explorer/gamer/gaming-pcs/what-is-dlss-multi-frame-generation/?srsltid=AfmBOorRKkdN2qhy7VT9sjw2LvhrUSVw5zWmlMrvriqujwCDFqdnT28E.

Digital Foundry. 2025. “AMD FSR 4 Upscaling Tested vs DLSS 3/4 - a Big Leap Forward - RDNA 4 Delivers!” YouTube. March 5, 2025. https://www.youtube.com/watch?v=nzomNQaPFSk.

Edser, Andy. 2025. “Ray Tracing Is Quickly Becoming Inescapable and I Think It’s Time We Bit the Bullet and Embraced It.” PC Gamer. February 20, 2025. https://www.pcgamer.com/hardware/ray-tracing-is-quickly-becoming-inescapable-and-i-think-its-time-we-bit-the-bullet-and-embraced-it/.

Intel Gaming. 2024. “Intel XeSS 1.3 Accelerates into the next Generation of AI Upscaling – Intel Gaming Access.” Intel.com. April 4, 2024. https://game.intel.com/vn/stories/intel-xess-1-3/.

Lin, Henry C, and Andrew Burnes. 2022. “Introducing NVIDIA DLSS 3.” NVIDIA. September 20, 2022. https://www.nvidia.com/en-us/geforce/news/dlss3-ai-powered-neural-graphics-innovations/.

Linus Tech Tips. 2022. “Double Your FPS for FREE!*** - Nvidia DLSS 3.0.” *YouTube*. https://www.youtube.com/watch?v=PUTsE1q1bYI.

McLoughlin, Aleksha. 2025. “What Is Frame Generation? The GPU Technology Explained in 2025?” TechRadar. March 17, 2025. https://www.techradar.com/computing/gpu/what-is-frame-generation.

NVIDIA. 2025. “NVIDIA DLSS & GeForce RTX: List of All Games, Engines and Applications Featuring GeForce RTX-Powered Technology and Features.” NVIDIA. January 30, 2025. https://www.nvidia.com/en-us/geforce/news/nvidia-rtx-games-engines-apps/.

“R/Nvidia, My Experience with Frame Generation, as the Average Consumer.” n.d. Reddit.com. Accessed December 3, 2025. https://www.reddit.com/r/nvidia/comments/1joddqd/my_experience_with_frame_generation_as_the/.

FromSoftware, Inc.

Overview

FromSoftware is a Japanese company specializing in developing and publishing video games and Internet content. The company was founded in 1986, in Sasazuka, Shibuya-ku, Tokyo, for the development of business application software. FromSoftware transitioned into video game development for the first time in 1994 (FromSoftware 2023). Since then, FromSoftware has created a series of distinctive and commercially successful game franchises including *Demon's Souls*, *Armored Core, Dark Souls*, *Bloodborne*, *Sekiro: Shadows Die Twice*, and *Elden Ring*.

Currently under the leadership of representative director and president Hidetaka Miyazaki, FromSoftware has a capital of 18.5 billion Japanese Yen (roughly 127.2 million US dollar). The main shareholders of the company are Kadokawa Corporation, Sixjoy Hong Kong Limited, and Sony Interactive Entertainment Inc. As of June 2023, the company has 397 employees and operates from its Tokyo headquarter, with an additional studio located in Fukuoka, Japan. (FromSoftware 2023).

Origin and Early History

After its founding, FromSoftware's initial products were unrelated to the video game industry, focusing instead on business application software. In 1994, in response to Sony's launch of its gaming console, PlayStation, FromSoftware released 3D real-time RPG game *King's Field* as its first venture into the game software development market (FromSoftware 2023).

FromSoftware continued developing 3D virtual world creation through the sequels of *King's Field* and mech battle simulation game franchise *Armored Core* in response to later launches of models and generations of consoles. After joining PlayStation 2 software market in 2000, the company began developing and releasing titles for Nintendo GameCube and Microsoft Xbox as first game development for multiple platforms in 2002. In 2004, FromSoftware entered the mobile gaming market by releasing *King's Field* and *Armored Core* on mobile phones and Sony PlayStation Portable (PSP) (FromSoftware 2023). In its early history, FromSoftware mainly developed first-person and third-person RPG, action, and mecha games (Ciolek 2015).

Franchise Development: Soulslike as a Genre

After the replacement of RPG by mecha games in its early ages, FromSoftware's game production strategy was represented by rapid and regular releases of 35 games between 1999 and 2006. Among these, some received strong reviews while others faced harsh critics (Rondina 2022).

In 2009, FromSoftware released *Demon's Souls*, which is the Japanese company's first one to be considered a hit. As a successor, *Dark Souls* was released in 2011, with positive receptions. After a series of releases of mecha games that resulted in many critics, Hidetaka Miyazaki became the president of FromSoftware. The company's strategy shift involves releasing less frequently but investing more in each of them (Rondina 2022).

In 2015, FromSoftware released *Bloodborne*, which sold over one million copies in its first month (Kain, 2015). With the release of *Dark Souls III*, the final installment of the *Dark Souls* franchise, by September 2020, the series had exceeded 27 million units worldwide (FromSoftware 2020). Released in 2019, the *Sekiro: Shadows Die Twice* had sold 10 million copies worldwide until September 2023 (FromSoftware 2023). *Elden Ring*, which is one of the company's latest releases, exceeded 20 million copies sold worldwide within one year of its release (Fromsoftware 2023).

FromSoftware franchises have been nominated for The Game Awards multiple times and won. The company was nominated for Developer of the Year, and *Bloodborne* was nominated for Game of the Year in 2015 (Sarkar 2015). *Sekiro: Shadows Die Twice* won this title in 2019, and *Elden Ring* won in 2022 (The Game Awards). Since the establishment of this award, FromSoftware is the only developer with more than one win.

Starting with its inception and named after it, *Demon's Souls* is the spiritual predecessor of a subgenre under action RPG (Siegle 2022). With game design features, such as high and fixed difficulty, punishing consequences of death, checkpoints that reset the world, methodical combats, etc., in addition to distinct dark, atmospheric, and fragmented narrative and lore setting, franchises developed by FromSoftware are categorized as Soulsborne games. FromSoftware's design of game mechanics has had an impact on other developers in the industry. Franchises like *Nioh* by Koei and *Star Wars Jedi* by Respawn Entertainment are referred to as Soulslike games (IGN 2023).

Partnership with Publishers and Platforms

FromSoftware strategically collaborated with various publishers for each of their game releases. Since its early days, FromSoftware has developed games based on the releases of new generations of consoles. Sony's PlayStation served as the primary platform through which the company released games. Representatively, published by Sony Interactive Entertainment, *Demon's Souls* (2009), and *Bloodborne* (2015) remain exclusive to the PlayStation platform until the end of 2023 as an asset to its game library. FromSoftware collaborated with Sony's Blueprint Games to develop and publish the remake of *Demon's Souls* for the new PS5 console (Sony Interactive Entertainment 2021).

In contrast to releasing *Dark Souls* and *Elden Ring* Franchise through Bandai Namco, FromSoftware opted for Activision to publish *Sekiro: Shadows Die Twice* in 2019. According to FromSoftware community manager Yasuhiro Kitao, the company does not "have the clout to publish outside of Asia and Japan". Therefore, the company negotiated with Activision to access the North American and European markets, leveraging the latter's financial and infrastructural resources (Taylor 2018).

Tencent and Sony Allotment

As a part of the company's global strategy, FromSoftware underwent a capital increase through third-party allotment in 2022. Tencent, a Chinese technology and media corporation, and Sony Interactive Entertainment acquired more shares in FromSoftware, joining major shareholder Kadokawa Corporation. Following this allotment, Kadokawa now holds 69.66% of the shares, while Tencent's subsidiary, Sixjoy Hong Kong Limited, and Sony Interactive Entertainment hold 16.25% and 14.09% respectively (Kadokawa 2022).

This decision followed the global success of *Sekiro: Shadows Die Twice* and *Elden Ring*. The capital procurement will primarily support a more assertive stance towards investment into in-house development (FromSoftware 2022). FromSoftware recognizes Tencent's capabilities to develop and deploy mobile games and other network technologies in the global market including China. Tencent and Kadokawa had previously engaged in joint ventures promoting media mix strategy targeting the Chinese market and a strategic alliance in the anime and game fields. FromSoftware also recognizes Sony's strength in deploying IP in games, videos, and various other media in the global market, as seen through their collaboration in global Direct-to-Consumer business operations, branded hardware, and games business (Kadokawa 2022).

Building upon past collaborations with both the allottees, the purpose of this allotment is to strengthen FromSoftware's capabilities to create and develop game IP and to establish a framework that allows expansion of the scope of the company's own publishing in the global market. FromSoftware anticipates that this allotment will contribute to enhancing its corporate value in the medium and long term (Kadokawa 2022).

-W.Z., Fall 2023

References

"2019." *The Game Awards*. https://thegameawards.com/rewind/year-2019.

"2022." *The Game Awards*. Accessed December 13. https://thegameawards.com/rewind/year-2022.

"About." 2023. *Company*. FromSoftware. Accessed December 13. https://www.fromsoftware.jp/ww/company_about.html.

"Announcement of Issuance of New Shares through Allocation to Tencent and Sony." 2022. *Press Release*. FromSoftware. August 31. https://www.fromsoftware.jp/ww/pressrelease_detail.html?tgt=20220831_announcement.

"Bandai Namco Entertainment and FromSoftware Jointly Developed Action RPG 'ELDEN RING' s 20M Units Sold Worldwide!" 2023. *Press Release*. FromSoftware. February 22. https://www.fromsoftware.jp/ww/pressrelease_detail.html?tgt=20230222_eldenring_salesdata.
Ciolek, Todd. 2015. "The History of from Software." *IGN*. March 16. https://www.ign.com/articles/2015/03/16/the-history-of-from-software.

"FromSoftware, Inc. and Activision Publishing, Inc. Jointly Developed Title SEKIRO: SHADOWS DIE TWICE 10M Units Sold Worldwide." 2023. *Press Release*. FromSoftware. September 26. https://www.fromsoftware.jp/ww/pressrelease_detail.html?tgt=20230926_sekiro_salesdata.

"History." 2023. *Company*. FromSoftware. Accessed December 13. https://www.fromsoftware.jp/ww/company_history.html.

IGN Staff. 2023. "The 10 Best Soulslike Games." *IGN*. November 16. https://www.ign.com/articles/the-best-soulslike-games.

"Joint Development Project by BANDAI NAMCO Entertainment Inc. and FromSoftware, Inc. 'DARK SOULS' Series Exceeds 27 Million Sales." 2020. *Press Release*. FromSoftware. May 19. https://www.fromsoftware.jp/ww/pressrelease_detail.html?tgt=20200519_darksoulsseries_salesdata.
Kain, Erik. 2015. "'Bloodborne' Has Already Sold over 1 Million Copies." *Forbes*. Forbes Magazine. April 14. https://www.forbes.com/sites/erikkain/2015/04/14/bloodborne-sells-through-over-1-million-copies/?sh=7f2acbb658c9.

"Notice Concerning Consolidated Subsidiary's Capital Increase through Third-Party Allotment of Shares." 2022. *KADOKAWA*. August 31. https://group.kadokawa.co.jp/global/information/media-download/847/94184bd1a0aebd1f/.

Rondina, Steven. 2022. "The History of Fromsoftware, Elden Ring and Dark Souls Developer." *win.gg*. June 24. https://win.gg/news/the-history-of-fromsoftware-elden-ring-and-dark-souls-developer/.

Sarkar, Samit. 2015. "Here Are the Nominees for the Game Awards 2015." *Polygon*. November 13. https://www.polygon.com/2015/11/13/9728874/the-game-awards-2015-nominees.

Siegle, Michael. 2022. "What Is a Soulslike?" *Game Rant*. June 24. https://gamerant.com/soulslike-genre-features-definition-explained/.

"Sony Interactive Entertainment to Acquire Bluepoint Games." 2021. *Sony Interactive Entertainment*. October 1. https://sonyinteractive.com/en/press-releases/sony-interactive-entertainment-to-acquire-bluepoint-games/.

Taylor, Ivy. 2018. "Why from Software Chose Activision to Publish Sekiro: Shadows Die Twice." *GamesIndustry.Biz*. August 28. https://www.gamesindustry.biz/when-from-software-knocks-on-your-door-and-says-hey-we-wanna-make-a-game-you-have-only-one-answer-right.

Gacha

Overview

Gacha is a mechanic commonly implemented in Eastern free-to-play mobile games as the primary system of monetization in which a player pulls/rolls/spins to get a reward from the game. In the West, loot boxes are more commonly implemented. Although they share many similarities, the main distinction between them is that gacha is the main monetization source in the game, while loot boxes are a complementary monetization feature. Therefore, while all gachas are loot boxes, not all loot boxes are gachas (Vicente, 2020). Gacha rewards also aren't often cosmetic because this mechanic is utilized to be integral to unlocking core features of the game such as playable characters or better weapons/equipment.

Players roll into the gacha through in-game currency that can be gained through gameplay or by purchasing with real money. Gacha rewards aren't completely random, as each reward has a drop rate: the percentage of getting a particular item or character (the rarer the reward, the smaller the percentage). A pity system is also often implemented in gacha games in which for every specific number of rolls a player makes, they are guaranteed at least one reward of rare quality (Udonis, 2021).

Brief Origin of Gacha

Gacha gets its name from "Gachapon," Japan's toy vending machine capsules that first appeared in front of neighborhood sweet shops in the 1960s and now can be found anywhere (in stores or outside on streets). People place a few quarters in the slot of the machine, turn the crank, and see what prize pops out. If a person is aiming for a specific prize, they have to keep inserting money to try again (Alexandra, 2020).

Before gacha, the most common method of selling individual virtual items was through developers creating DLC (downloadable content) that needed to be purchased separately from the game. The gacha mechanic wouldn't be utilized in video games until 2010 when the Japanese social network game created by Konami, *Dragon Collection,* was released on GREE, a social networking platform. It's a card battler in which players accumulate character sprites through quests and adventures, and every couple of quests, players are rewarded by given the chance to pull for rewards via opening chests that gave them random artifacts that can boost their card characters (N3TWORK, 2018). Real money payment was required if players wanted to obtain more artifacts. A simple yet effective system was created and *Dragon Collection* quickly became one of Konami's most profitable games. Seeing the monetary success provided, soon after, other companies followed in implementing gacha mechanics into their mobile games.

Most Used Types of Gacha

There are a variety of methods of how gacha has been implemented, and multiple methods of gacha are often utilized together. Here are the 3 most common types of gacha: Box/Package gacha, Step up gacha, and Scratch/Consecutive gacha.

In a Box/Package gacha, players are offered a box with a fixed amount of prizes inside. The box got emptier after each gacha draw pulled out a prize, therefore increasing the possibility to draw out a rare reward (Renatus, 2017). For example, in GREE's *Doliland,* there's a machine filled with cards ranging from normal to super rare. Every time a player pulled, the machine had fewer cards, therefore increasing their chances of obtaining the rarest card (Dr. Toto, 2016).

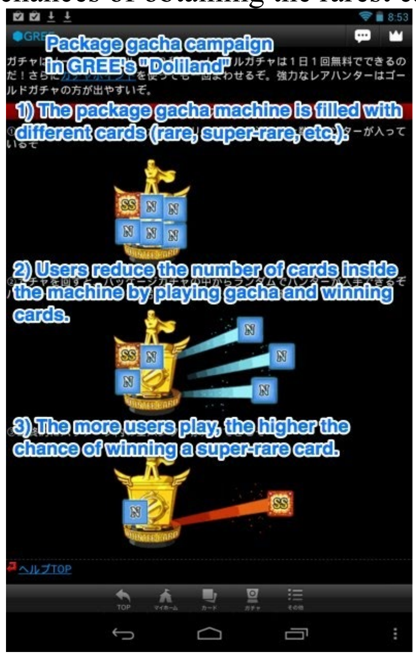


Figure 1: Screen capture explaining *Doliland*'s box gacha system

In Step up gacha, players increase their odds to win rare items every time they spend money on gacha. In the first step (or first gacha), the player could be given a small reward. Then, in the second step, their odds to win a rare item are increased by a factor of two. Then their third step, the factor is increased by three, etc. Therefore it is integral for players to roll in one large session (Dr. Toto, 2016).

Figure 2: Example of Step-Up Gacha in Electronic Arts Japan's *Tetris Monsters*, translated into English.

Scratch/Consecutive Gacha is a combination of mechanics that provides players with a scratch card with boxes of concealed prizes that can be discovered by buying gacha roll sets. This mechanic emphasizes and rewards the usage of multiple gacha rolls rather than one at a time (Renatus, 2017). For example, in GREE's action RPG *Shoumetsu Toshi*, once players earn enough scratch points by paying for consecutive gacha rolls, they're given the option to scratch off multiple boxes on the scratch card (Dr. Toto, 2016).

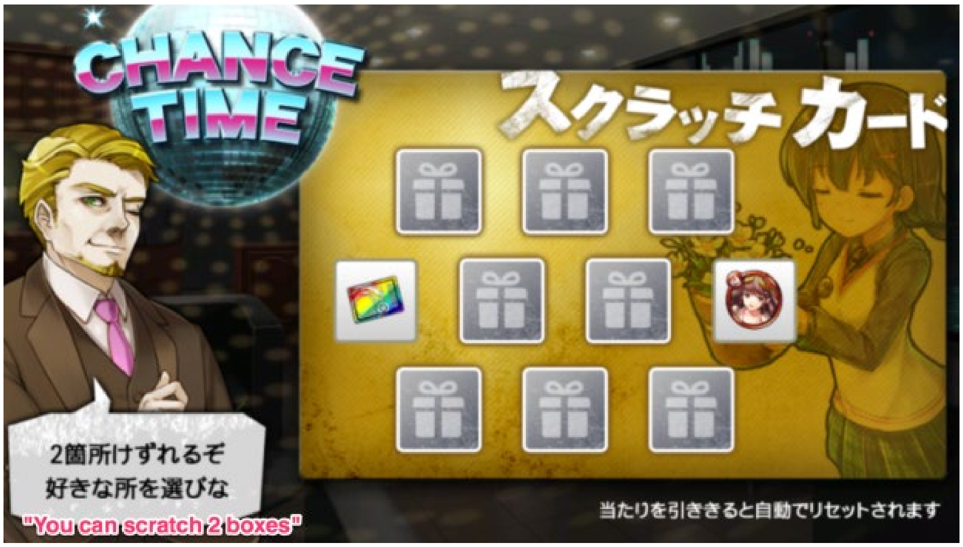


Figure 3: Screen capture of *Shoumetsu Toshi*'s scratch card

Monetization

Gacha has become an extremely lucrative method in the gaming industry because of how the mechanic is implemented into games in a way that pulls players into playing and then gauges their willingness to pay with its usage of limited banners, beginner deals, and the illusion of free-to-play. One such example is *Genshin Impact*, a free-to-play ARPG developed by miHoYo. *Genshin* generates revenue from their gacha mechanic in which players utilize "Primogems" to roll on limited banners that contain 5-star characters and 5-star weapons. Players can obtain Primogems by playing the game, but due to the finite amount of obtainable Primogems and the time constraints on the banners, players are incentivized to purchase in-game premium currency (Genesis Crystals that have a 1:1 conversion to Primogems) with real-life money. Then, although *Genshin* is free-to-play, there is content intentionally locked unless players have that character (ex: lore on the character/backstory), so players are urged to obtain a character they love by any means necessary (MJE, 2022). Finally, *Genshin* provides users with beginner deals that pull players into continuously paying money through subscriptions (for $5, the "Welkin Moon" provides 90 Primogems a day for 30 days) or first-time buyer bonuses (Rodriguez, 2020).

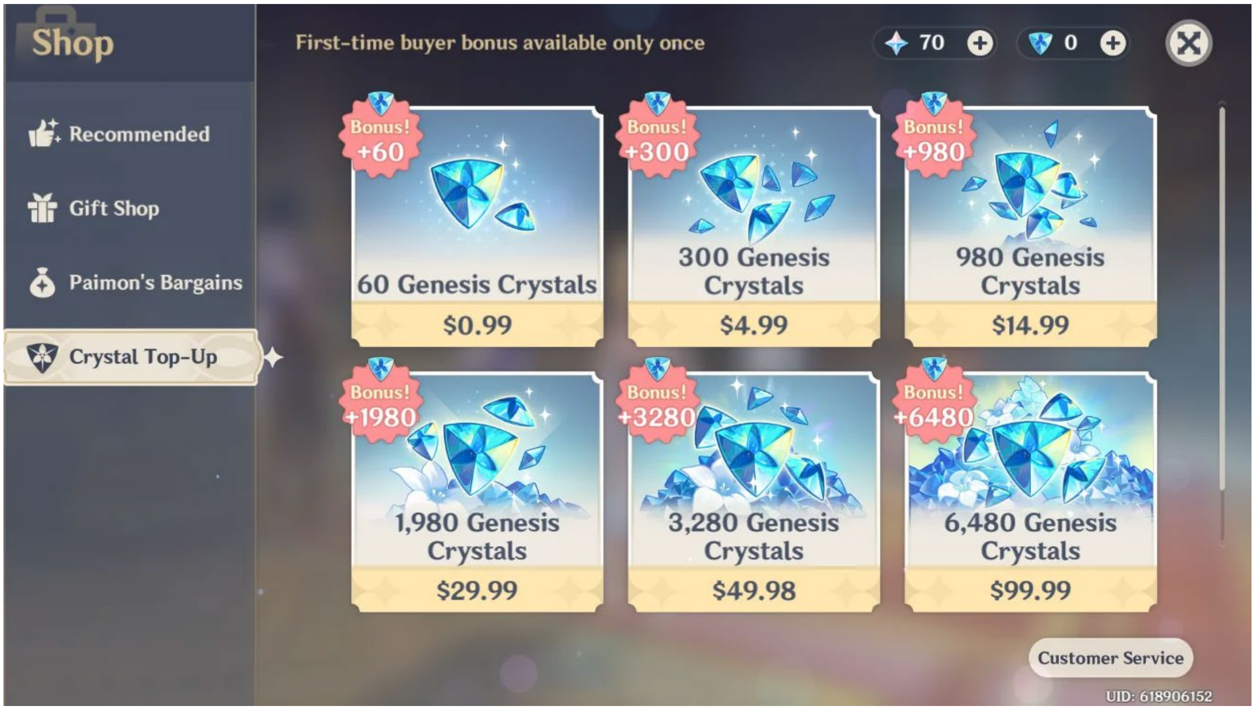


Figure 4: Screen capture of *Genshin Impact*'s in-game store as of December 11, 2022

Through these implementations, the gacha mechanic has shown to be a lucrative monetization model, as proven by *Genshin Impact*, which has been the third highest-grossing mobile title globally since its launch on September 28, 2020 with $3.7 billion in total player spending on mobile and the number one gacha game by revenue since 2020 (followed by *Rise of Kingdoms* and *Three Kingdoms Strategic* with $1.7 billion respectively) (Obedkov, 2022).

Similarities to Gambling

Gacha has been compared to gambling due to the many similar elements they share; the most notable element being the method of providing money for the random chance to obtain a prize. But, since the reward is virtual and players can never take their money out of the gacha system, unlike gambling, gacha isn't explicitly considered gambling and therefore has escaped regulation ("Why 'Kompu Gacha' Was Banned," 2012).

However, while gacha as a whole hasn't been regulated, Japan's Consumer Affairs Agency banned a type of gacha on May 18, 2012. In Kompu gacha, a grand prize was only given to players who won a set of other items (via gacha) first. Kompu gacha had a much lower chance even though there was a much higher payout required, which made it too similar to gambling. This ban also occurred after two cases in which a middle school boy spent $5,000 in a month and a younger student spent $1,500 in three days on Kompu gacha games (Russell, 2012).

Origin of Gacha's Pity System

Besides the Kompu Gacha Ban in 2012, Gacha has had no further explicit regulations and laws. However, in 2016, Japanese streamer Taste streamed himself spending over $6000 pulling to obtain a limited character, Monkey, in the gacha game *Granblue Fantasy*. After this public

event, reports trickled in from other players stating that they also spent an obscene amount of money to obtain Monkey. Therefore, this incident, dubbed the Monkeygate scandal, was the catalyst for implementing the pity system, as Japan Online Games Association and the committee for gacha games, CESA, put out guidelines for gacha companies to follow. These guidelines included rules such as having clear and precise gacha rates, setting spending caps in-game, and a failsafe system that guaranteed a rare prize after a set amount of gacha pulling (ie. the pity system) (Barder, 2016).

-C.L., Fall 2022

References

Alexandra, Heather. “The Good Luck You Get Returning to Gacha Games Is Undoubtedly Bullshit.” Kotaku. Kotaku, January 29, 2020. https://kotaku.com/the-good-luck-you-get-returning-to-gacha-games-is-undou-1841310322.

Barder, Ollie. “Japanese Mobile Gaming Still Can't Shake off the Spectre of Exploitation.” Forbes. Forbes Magazine, April 4, 2016. https://www.forbes.com/sites/olliebarder/2016/04/04/japanese-mobile-gaming-still-cant-shake-off-the-spectre-of-exploitation/.

Blog, Betable. “Why ‘Kompu Gacha’ Was Banned.” Game Developer, May 25, 2012. https://www.gamedeveloper.com/business/why-quot-kompu-gacha-quot-was-banned.

Mje. “Is Gacha Gaming a Profitable Strategy?” Michigan Journal of Economics, April 19, 2022. https://sites.lsa.umich.edu/mje/2022/04/19/is-gacha-gaming-a-profitable-strategy/.

N3TWORK. “The History of Gacha in Video Games.” Medium. Medium, October 1, 2018. https://medium.com/@john_23522/the-history-of-gacha-in-video-games-2f5640a3160d.

Obedkov, Evgeny. “Genshin Impact Remains 3rd Highest-Grossing Mobile Game Globally since Its Launch, with $3.7 Billion in Revenue.” Game World Observer, September 29, 2022. https://gameworldobserver.com/2022/09/29/genshin-impact-revenue-3-7-billion-sensor-tower.

Renatus. “Renatus Media, LLC.” Mobile games publishing, social games publishing, game promotion for indie game developers - play top mobile & social games for iOS, Android, Facebook, Amazon - Google Play & App Store Marketing - Renatus.com. Accessed December 11, 2022. https://renatus.com/gacha-types-of-gotcha.

Rodriguez, Jason. “Genshin Impact Guide: Microtransactions, Wishes, and Currencies Guide.” PC Invasion. PC Invasion, October 6, 2020. https://www.pcinvasion.com/genshin-impact-guide-microtransactions-wishes-and-currencies-guide/.

Russell, Jon. “Japan Mulls Ban on Controversial but Lucrative Game Genre.” TNW | Asia, May 7, 2012. https://thenextweb.com/news/japans-mobile-gaming-industry-faces-a-ban-on-lucrative-kompu-gacha-games.

Toto, Dr. Serkan, and Dr. Serkan Toto. “How Japanese Mobile Game Makers Go after Whales: 5 Popular Gacha Mechanics.” Kantan Games Inc. CEO Blog - From Tokyo, Japan, March 14, 2016. https://www.serkantoto.com/2016/03/14/gacha-monetization-japan/#:~:text=For%20instance%2C%20if%20a%20board,the%20six%20pips%2050%20times).

Vicente, Vann. “What Exactly Is a ‘Gacha’ Video Game?” How. How-To Geek, March 12, 2020. https://www.howtogeek.com/465429/what-exactly-is-a-gacha-video-game/.

Game Awards, The (TGA)

Overview

The Game Awards (TGA), produced and hosted by Canadian games journalist Geoff Keighley, is an annual award ceremony honoring outstanding achievements of art, technology, and gameplay in the video game industry. As a spinoff from another Keighley's show, Spike VGAs (Video Game Awards), TGA held its first awards ceremony on December 5, 2014 (Berg 2014; Schreier 2014). As of 2023, the TGA show has established 31 awards and features world premieres of upcoming games, musical performances, and celebrity guest appearances. Live streaming of the show is available on multiple platforms globally. Aiming at elevating games to "The 9th Art," TGA has promoted games, recognizing and celebrating the value of video games along with their creators (Martens 2017).

Awards & Acceptees

Awards

According to Keighley, TGA is a show for creators, who spend years creating incredible intricate, interactive experiences but remain mostly anonymous (Park 2019). Prior gaming awards shows tended to prioritize the commercial value of the product over the talent of game creators, which propels him to establish academic awards dedicated to the world of gaming (Shanley 2019).

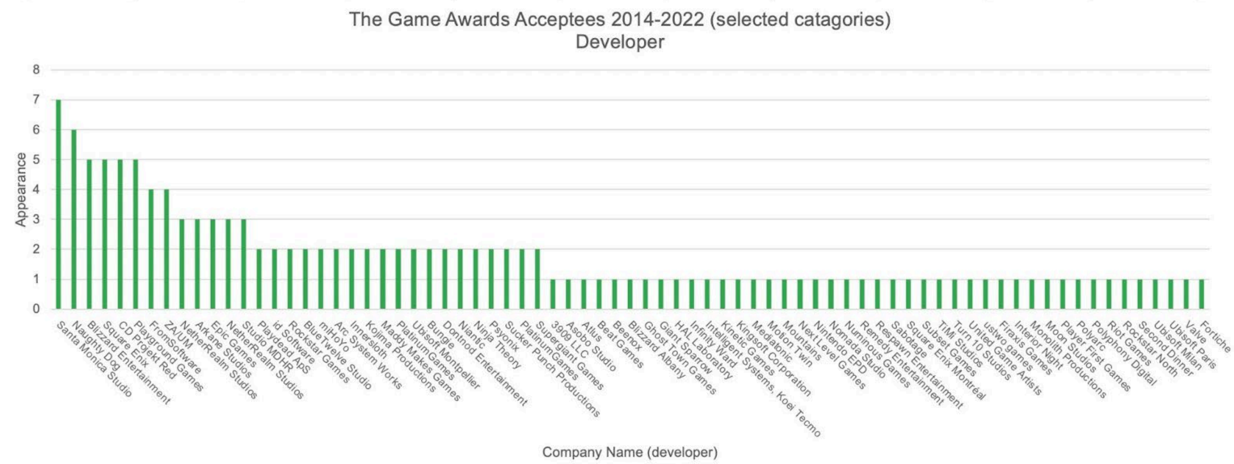
Until 2023, TGA has introduced awards that cover: *Best Game Direction, Best Narrative, Best Art Direction, Best Score and Music, Best Audio Design, Best Performance,* and *Best Adaptation*. Some categories overlap with some of those in the Academy Awards. TGA has also introduced categories exclusively for video games, including *Best Mobile Game, Best Indie, Best VR/AR, Best Action Game, Best Action/Adventure, Best Role Playing, Best Fighting, Best Family, Best SIM/Strategy, Best Sports/Racing,* and *Best Multiplayer* (TheGameAwards 2023).

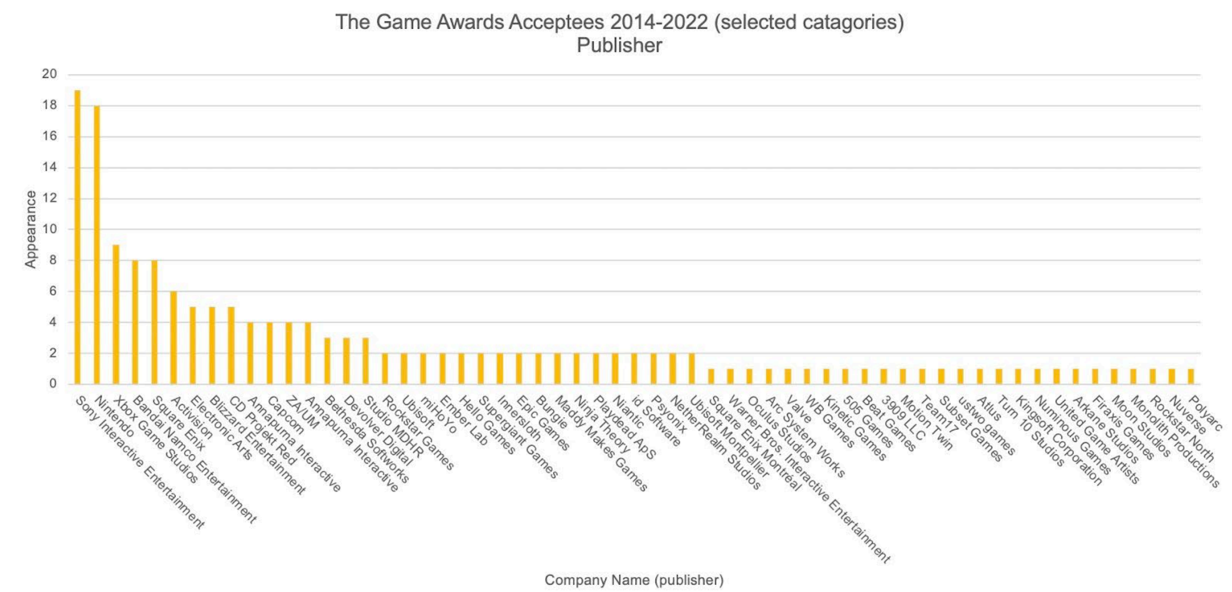
The rest of the titles will be given to games and individuals that have a special impact on the game industry, including *Game of the Year*, *Game for Impact*, *Best Ongoing*, *Innovation in Accessibility*, *Best Community Support*, *Content Creator of the Year*, *Best Debut Indie*, *Most Anticipated Game*, *Best Esports Game*, *Esports Athlete*, *Best Esport Team*, *Best Esports Coach*, and *Best Esports Event*. Among these, *Game of the Year* is an annual highlight, eagerly anticipated by all (TheGameAwards 2023).

Acceptees

Apart from individual awards and esports events, the recipients of these awards primarily hail from leading entertainment companies in the United States and Japan. Per the Game Awards official rewind (2014~2022), major publishers include Sony Interactive Entertainment, Bandai Namco Entertainment, Xbox Game Studios, Square Enix, and Nintendo. Awards for developers often go to first-party developers or subsidiaries of major publishers. While some notable independent games like Supergiant Games' *Hades* have left their mark, they aren't as frequent in appearances as major enterprises. Notably, games might receive multiple awards or nominations

in the same year or win different awards in consecutive years (e.g., Square Enix's Final Fantasy VI), highlighting the prominence of certain companies on the list (TheGameAwards 2023).





Figures 1 and 2: The Game Awards Acceptees 2014-2022, developers and publishers respectively. Data collected from The Game Awards official rewind. https://thegameawards.com/

Selection Process

The TGA selection process includes three stages involving two review groups: an International jury team and public votes. The jury submits unranked game ballots for each category in the first stage. Five games with the most ballots become nominees for public voting. The public can vote before the event dates on TheGameAwards.com or TGA's Discord server, with fans in China using platforms like Bilibili. Winners result from a blend of jury votes (90%) and public fan voting (10%)(TheGameAwards 2023).

As the Awards Season begins, publishers and developers aiming for consideration receive a list of eligible outlets for nomination ballots. Those outlets, or the jury, comprising 100+ global media and influencer outlets, select nominees for each category. Members are mainly from the US, a few from the UK, and some from other countries. Esports categories involve specialized juries like TechTudo and Gamecores. Accessibility categories are handled by selected individuals. TGA announces that Geoff Keighley, other members of the Advisory Board, and the show sponsors, are not involved in the selection process (TheGameAwards 2023).

TGA avoids determining winners solely from fan votes due to inherent issues in comparing single-platform to multi-platform games. The "voting outlets" approach enables a broader critical assessment in a limited period (TheGameAwards 2023). However, this could result in highly anticipated games missing from nomination due to "bad timing" of release and voters' limited exposure to the game. Indeed, achieving equal visibility for all competitors is challenging for large-scale award ceremonies like TGA: voters' inclination to favor widely available and highly-publicized titles often results in relegating smaller, less marketed games to indie-specific categories or omitting them entirely (Carpenter 2020).

Events & Live Streaming

The annual event, often in early December, traditionally occurs offline with live streaming. Since 2014, it's been at the Microsoft Theater in LA, except for 2020 (virtual) and 2023 at Peacock Theater (LA). The show includes: 1) nominee/winner announcements, world premieres, and musical performances within a 3.5-hour duration, sometimes featuring platform-specific events like giveaways. Over a decade, show length averages 3 to 3.5 hours, occasionally nearing 4 or going as short as 2.5 hours (TheGameAwards 2023).

In the earlier years, the show shared more behind-the-scenes stories of game making (e.g., voice actor), whereas recent editions focus on unveiling game companies' latest projects. Keighley responded to the change that as an initiative to push games into the mainstream, the show prioritizes gaming more than any other part of the entertainment. Thus, companies are welcome to "utilize the platform for maximum impact when unveiling their latest projects," which typically manifest as a game trailer, showcasing exquisite CGI and actual gameplay demonstrations. However, criticism points out that a lack of spontaneity has made the show "patience-testing". The award-winning games and their recipients appeared eclipsed amidst the vast array of "World Premieres." Special guests sometimes occupy winners' time, or the announcements are read swiftly by the host. Film promotions have also been integrated, diverging from the show's gaming focus, raising questions about its credibility (Farokhmanesh 2018, Gordon 2022, Tapsell 2023)

Despite controversies, the audience count, especially in online streams, consistently rises. Live streaming is distributed through 11 platforms to be watched for free, including dominant game streaming platforms (e.g., YouTube, twitch, Facebook Live) and social media (X, Instagram Live, TikTok Live). According to data provided by TGA on its livestream viewers' number from 2014-2022, the event has experienced a positive growth rate in terms of global audience engagement. Repost of data from established publishers gave similar analyses (TheGameAwards 2023, Crecente 2016, Stedman 2020, Beresford 2021, Zheng 2022)

Business Model

TGA is 100% owned by Geoff Keighley, CEO of The Game Awards Inc., who sells the promotional inventory to major publishers, negotiates global carriage deals, and oversees production. Except for Keighley, the industry itself plays a strong role. Since its debut, an advisory board consisting of industry leaders at Nintendo, Ubisoft, Sony, Microsoft, Electronic Arts, Activision, etc has been assisting the development (TheGameAwards 2023). The revenue of each annual event comes almost entirely from game companies' sponsorship, as well as non-endemic brands like Verizon and Netflix. According to *Protocol*, Keighley "wants to sell the most possible eyeballs around the world to the game giants who pay to provide the show's most important content." (Schiesel 2021). Nevertheless, the full list of TGA's official partners remains unclear. Thus, game designers, publishers, awards organizers, partners, and sponsors are intricately intertwined behind the annual awards ceremony.

-S.H., Fall 2023

References

Beresford, Trilby. "The Game Awards Claims High of 85M Views." The Hollywood Reporter, December 20, 2021. https://www.hollywoodreporter.com/business/digital/the-game-awards-record-setting-85-million-livestreams-1235064736/.

Carpenter, Nicole. "Why Some of 2020's Big Games Didn't Get Game Awards Nominations." Polygon, November 18, 2020. https://www.polygon.com/2020/11/18/21574150/the-game-awards-nominations-2020-games-list.

Crecente, Brian. "The Game Awards Audience up 65 Percent to 3.8m." Polygon, December 6, 2016. https://www.polygon.com/2016/12/6/13858794/the-game-awards-audience-up-65-percent-to-3-8m.

Farokhmanesh, Megan. "The Game Awards Has Made Its Peace with What It Can and Can't Do." The Verge, December 7, 2018. https://www.theverge.com/2018/12/7/18131058/game-awards-2018-geoff-keighly-creaotr-streaming-tga-hydrobot.

Gordon, Lewis. "The Game Awards: Three Patience-Testing Hours of Video Game Advertorials." The Guardian, December 9, 2022. https://www.theguardian.com/games/2022/dec/09/the-game-awards-three-patience-testing-hours-of-video-game-advertorials.

Martens, Todd. "Geoff Keighley's Lifelong Obsession to Create a Video Game Oscars." Los Angeles Times, December 5, 2017. https://www.latimes.com/entertainment/herocomplex/la-et-hc-game-awards-20171205-story.html

Park, Gene. "The Game Awards: How Geoff Keighley Helped Create the Oscars for Gaming." The Washington Post, December 11, 2019. https://www.washingtonpost.com/video-games/2019/12/11/game-awards-how-geoff-keighley-helped-create-oscars-gaming/.

"Recap: The 2014 Game Awards boast a genuine spirit and love for the industry." UWIRE Text, December 9, 2014, 1. Gale Academic OneFile (accessed October 3, 2023). https://link.gale.com/apps/doc/A392905217/AONE?u=nellco_penn&sid=bookmark-AONE&xid=c59815f8.

Schreier, Jason. "There's a Big New Game Award Show Happening This December." Kotaku, November 10, 2014. https://kotaku.com/theres-a-big-new-game-award-show-happening-this-decembe-1656838986.

Shanley, Patrick. “How the Game Awards Brings an Industry Together: ‘Every Group Has Their Version of the Super Bowl.’” The Hollywood Reporter, December 17, 2019. https://www.hollywoodreporter.com/news/general-news/how-game-awards-became-industrys-super-bowl-1260952/.

Stedman, Alex. “The Game Awards 2020 Show Hits Record Viewership with 83 Million Livestreams.” Variety, December 17, 2020. https://variety.com/2020/gaming/news/the-game-awards-2020-viewership-numbers-livestreams-1234864828/.

Schiesel, Seth. “Meet the Man behind the Game Awards, the Most Influential Event in the Video Game Industry.” Protocol, December 31, 2021. https://protocol.com/game-awards-geoff-keighley.

Shanley, Patrick. “How the Game Awards Brings an Industry Together: ‘Every Group Has Their Version of the Super Bowl.’” The Hollywood Reporter, December 17, 2019. https://www.hollywoodreporter.com/news/general-news/how-game-awards-became-industrys-super-bowl-1260952/.

Tapsell, Chris. “The Game Awards Will Never Represent Our Industry in the Way It Needs, so What Next?” Eurogamer.net, December 8, 2023. https://www.eurogamer.net/the-game-awards-will-never-represent-our-industry-in-the-way-it-needs-so-what-next.

The Game Awards. “The Game Awards.” The Game Awards. Accessed October 3, 2023. https://thegameawards.com/.

The Game Awards. “The Game Awards 2021 Hits Record 85 Million Livestreams.” The Game Awards, December 22, 2022. https://thegameawards.com/news/the-game-awards-hits-record-85-million-livestreams.

Zheng, Jenny. “The Game Awards 2022 Received over 103 Million Views, Sets New Viewership Record.” GameSpot, December 16, 2022. https://www.gamespot.com/articles/the-game-awards-2022-received-over-103-million-views-sets-new-viewership-record/1100-6510126/.

Game Freak

Overview

Game Freak Co., Ltd., is a Japanese video game developer company located in Setagaya, Tokyo. It was cofounded by Satoshi Tajiri, Ken Sugimori, and Junichi Masuda on April 26, 1989. To date, Game Freak has developed over 50 games and additional software to support these games across various platforms. It is best known for creating all the main Pokémon video games including the Pokémon Sword/Pokémon Shield games in 2019 (Game Freak 2020). It jointly owns the Pokémon Company with Nintendo Co., Ltd., and Creatures Inc (The Pokémon Company 2020). Game Freak also owns Koa Games, a mobile game development company.

Founding

Initially, Game Freak was a Japanese video game magazine created by Satoshi Tajiri in 1983. Tajiri would visit arcades and conduct interviews to gather tips for playing popular arcade games. Although his magazines sold well, Tajiri was always interested in making games. Working with friends who also had a passion for video games, Tajiri released Quinty, also known as Mendel Palace, in 1989, which was eventually published by Bandai Namco. The game's success and the creators' desire to make games for people to enjoy led them to cofound Game Freak Inc. As cofounder and Managing Director Junichi Masuda put it, Game Freak is in the pursuit of "the fun of play," as he sees Game Freak as more of a team of people who like games as opposed to a company (Game Freak 2020). From there, it developed the successful Yoshi (1991), which established an enduring relationship with Nintendo through this collaboration, followed by several notable games including Mario & Wario in 1993 and Pulseman in 1994 (Tajiri 2004).

Success with Pokémon

Tajiri came up with the idea of a game based on catching monsters through his childhood hobby of bug collecting. When Game Freak pitched the idea to Nintendo, Nintendo didn't expect much from it and allowed Game Freak to pursue it so long as they had the funds for it. A game that took six years of development and experimentation, Pokémon Red/Pokémon Green (1996) garnered monumental success, placing it within the top ten best-selling games of all time (Hilliard 2018). In its first year of release in the United States, the Pokémon franchise generated $5 billion, nearly as much as the whole U.S. games industry in 1998 (Buckingham and Sefton-Green 2004). Pokemon Red/Pokémon Green, and the later released Pokemon Blue (1996) are estimated to have sold over 31 million copies worldwide (Newsbeat 2019). Unknowingly to Game Freak at the time, Pokémon would gain a massive international following, and the games would be adapted into other forms of media including trading cards, tv shows, movies, comics, spin-off games, and more.

Following *Pokémon Red/Pokémon Green*, Game Freak released *Pokémon Gold/Pokémon Silver* in 1999. Despite the financial and developmental obstacles of having worked on the previous Pokémon games for six years, the *Pokémon Gold/Pokémon Silver* games were a worldwide hit,

and the fastest-selling games of their time (Hilliard 2018). This placed enormous pressure on Game Freak; after the release of *Pokémon Gold/Pokémon Silver*, many claimed that Pokémon was a fad that was dying out, creating an urgency to develop an even better game. In addition, the move to a new console, the Game Boy Advance, made Game Freak's work more difficult as they needed to adjust to the new interface and increased capabilities of the console. Game Freak was able to prove critics wrong: released in 2002, *Pokémon Ruby/Pokémon Sapphire* were great successes and showed that the Pokémon franchise was not just a momentary trend.

Game Freak continues to create lucrative games for the Pokémon franchise. As of September 2019, over 346 million units of Pokémon related software were sold (The Pokémon Company 2020). Game Freak has produced 33 main Pokémon games, translated into up to nine languages, for Nintendo consoles exclusively, citing their close relationship and the benefits of associating Pokémon with Nintendo's strong brand (Hilliard 2018). As of March 2020, Game Freak's *Pokémon Sword/Pokémon Shield* and *Pokémon: Let's Go Pikachu!/Let's Go Eevee!* (2018) were the fifth and sixth top selling titles for the Nintendo Switch, selling 17.37 million and 11.97 million units respectively worldwide (Nintendo 2020).

Gear Project

Since 2010, Game Freak has launched Gear Project, a new title development system that enabled game developers to create original games apart from the main Pokémon series. Working in groups of three, developers could spend three to six months working on a new project to be evaluated. If the game shows potential, it can be further developed into an actualized game. Junichi Masuda, creator of Gear Project, said "My image of it was three people or three gears come together and rotate even bigger gears…I created this system so people can easily work together. Try things out, give each other suggestions to constantly make improvements to make an interesting game," (Game Freak Official Channel 2019). The merits of this system include not only granting developers the opportunity to pursue their own ideas but enabling them to gain a greater perspective on game making. As the developers work in threes, the delegation and oversight of work becomes more critical. Masuda believes that the teams can gain insights to the overall process of making a game, a perspective they can apply in the future to other projects and would not have gained within their own respective roles while solely working on Pokémon. Since its inception, Gear Project has developed five original games including *Rhythm Hunter: HarmoKnight* (2012), *Pocket Card Jockey* (2013), *Tembo the Badass Elephant* (2015), *GIGA WRECKER* (2017), and *Little Town Hero* (2019), each achieving various degrees of success, but none reaching the level of Pokémon's prestige.

Expansion Across Platforms

Although Game Freak has traditionally developed software for Nintendo consoles, it is gradually expanding to other platforms and consoles. Game Freak showed its interest in entering mobile games development by acquiring Koa Games in 2015 (Social Games Inc 2015). Game Freak has since produced two mobile apps including a Pokémon spin-off, Pokémon Quest (2018) and a cloud service app, Pokémon Home (2020). Game Freak has also branched out to other platforms in addition to mobile: as of 2019, with the exception of Rhythm Hunter: HarmoKnight, all games produced from Gear Project specifically targeted and are available on either iOS and Android, PS4, Xbox One, or PC, some not available on Nintendo consoles at all (Onoue 2019).

Ultimately, while Game Freak will continue to value and work on the Pokémon franchise, Pokémon is no longer the biggest priority. While it has yet to do so, Game Freak has shown that it wishes to develop the next "Pokémon," a new game series that can not only achieve as much success but also enrich the lives of players. Game Freak is challenging itself by diversifying in terms of the types of games it makes and the platforms it develops the games for, indicating that players should expect more original games to come.

-A.L., Spring 2020

References

Buckingham, David, and Julian Sefton-Green. 2004. "Structure, Agency and Pedagogy in Children's Media Culture." In *Pikachu's Global Adventure: The Rise and Fall of Pokémon***,** edited by Joseph Tobin, 15-33. Durham: Duke University Press.

Game Freak. 2020. "Company." Game Freak Co., Ltd. Accessed May 14, 2020. https://www.gamefreak.co.jp/company/about/

Game Freak. 2020. "Game Freak DNA." Game Freak Co., Ltd. Accessed May 14, 2020. https://www.gamefreak.co.jp/dna/

Game Freak. 2020. "Works." Game Freak Co., Ltd. Accessed May 14, 2020. https://www.gamefreak.co.jp/works/

Game Freak Official Channel. 2019. "【公式】ゲームフリークひみつきち30周年生特番 Official Game Freak 30th Anniversary Special Program]." YouTube video, 1:57:54, October 16. Accessed May 14 2020. https://www.youtube.com/watch?v=K6EBgoJ8aJ4

Hilliard, Kyle. 2018. "The History of Pokémon." Game Informer, February 27. Accessed May 14, 2020. https://www.gameinformer.com/b/features/archive/2017/12/31/the-history-of-pokemon.aspx

Newsbeat. 2019. "Detective Pikachu: 'Pokémon created a world I wanted to live in.'" BBC News, May 10. Accessed May 14, 2020. https://www.bbc.com/news/newsbeat-48226573

Nintendo. 2020. "Top Selling Titles Sales Units." Nintendo Co., Ltd., March 31. Accessed May 14, 2020. https://www.nintendo.co.jp/ir/en/finance/software/index.html

Onoue, Masayuki. 2019. "Game Freak: 'We're trying to create something more than Pokémon.'" Interview by Andy Robinson. Video Game Chronicle, July 8. Accessed May 14, 2020. https://www.videogameschronicle.com/features/interviews/game-freak-were-trying-to-create-something-more-than-pokemon/

Social Game Info. 2015. "『ポケモン』開発会社として知られるゲームフリーク、スマホゲーム開発会 社のコアゲームスを吸収合併…『官報』で判明 [Game Freak Known As "Pokémon" Development Company, Merges With Koa Games, the Smartphone Game Development Company]." Social Game Info Inc, October 27. Accessed May 14, 2020. https://gamebiz.jp/?p=151524

Tajiri, Satoshi. 2004. "ポケモンを創った男田尻智[The Man Who Created Pokemon: Satoshi Tajiri]." Interview by Shinya Arino. Game Center CX Special!. Accessed May 14, 2020. https://www.youtube.com/watch?v=0gzTRo9Xlwk

The Pokémon Company. 2020. "Business Summary." The Pokémon Company Co. Ltd. Accessed May 14, 2020. https://www.pokemon.co.jp/corporate/en/services/#anc02

The Pokémon Company. 2020. "Company History." The Pokémon Company Co. Ltd. Accessed May 14, 2020. https://www.pokemon.co.jp/corporate/en/history/

gamescom

Overview

Gamescom, more commonly stylized as gamescom, is Europe's biggest business platform for the games industry and “the world's largest gaming event” for interactive games and entertainment (Gamescom). Since its first appearance under the name “gamescom” in 2009, it has annually transformed the city of Cologne, Germany into a gaming hub every August. Co-organized by Game (The German Games Industry Association), which also plays the role of “a conceptual sponsor,” and Bundesverband Interaktive Unterhaltungssoftware, BIU, gamescom lasts 5 days annually (Game, Spiegel 2008). In 2023, gamescom attracted 320,000 in-person visitors from over 100 countries.

Supplementary events such as the gamescom congress, gamescom Awards, and the devcom further solidify its reputation as a holistic gaming event, offering insights, recognition, and networking opportunities for participants.

The Evolution

Gamescom traces its roots back to the city of Leipzig with its inception under the name of “Games Convention” in 2002. This event rapidly solidified its status as one of the most innovative and successful new products in the German trade fair market. From its modest beginnings with 166 exhibitors and 80,000 attendees in its debut year, it expanded to host 503 exhibitors from 31 countries and an impressive 185,000 guests by 2007 (Spiegel 2008). Despite its success, Leipzig faced challenges, notably in hotel capacities which were often fully booked months in advance, prompting considerations for relocation (Spiegel 2008).

In 2009, a significant shift occurred. Due to Leipzig's decision to retain the “Games Convention” trademark, the event was rebranded as “GamesCom” when it relocated to Cologne. Therefore, in 2009, gamescom debuted under its current moniker in the gaming industry, marking a significant evolution in its history. The German Games Industry Association (Game) joined as a co-organizer at the same time, signifying a new era for the convention. Another reason for the move to Cologne was the city's superior logistical infrastructure, especially its connectivity. Furthermore, Cologne offered better accommodation capacities, addressing a key issue faced in Leipzig. Another influencing factor was the presence of industry giant Electronic Arts in Cologne, a significant voice in the BIU, which played a role in the relocation decision (Spiegel 2008).

gamescom Today

Gamescom 2023, held in Cologne, Germany, marked a significant milestone in the history of the world's largest computer and video games festival. The event attracted 320,000 in-person visitors from over 100 countries, surpassing the previous year's attendance of more than 265,000 (Rousseau 2023). Hosted at Cologne's Koelnmesse, gamescom 2023 featured 1,227 exhibitors from 63 countries, with a notable 76% being international exhibitors. The digital engagement of

the event was also impressive, reaching 180 million views online, including 20 million for the Opening Night Live. Gerald Böse, CEO of Koelnmesse, highlighted the event's success, stating, "gamescom is and remains the world's biggest gaming event" (Rousseau 2023).

Devcom, the game developer conference that accompanies gamescom, deepened its partnership with Xsolla in 2023. This partnership is described as going “beyond a classic sponsorship” to provide strategy, logistics, and a payment system for Devcom events (Takahashi 2021). Devcom boss Stephan Reichart emphasized the collaboration's importance: “We need people that have daily business operations to tell us what they need. And we can see how we can help them to bring them there, and how to support them” (Takahashi 2021). This strategic alliance reflects the evolving nature of gamescom and its related events, underlining their commitment to supporting the gaming community and fostering industry growth.

Gamescom Asia

In addition to the Cologne event, Gamescom Asia serves as the satellite Asian edition of Gamescom, aiming to be the “premier platform for Southeast Asian game developers to explore partnerships and expand their audiences globally” (Gamescom Asia). This event is a significant step for international studios looking to enter the fast-growing Southeast Asian games market. Organized by Koelnmesse Singapore and supported by the German Games Industry Association, Gamescom Asia features a business zone, an entertainment zone, and an industry gaming conference, covering the entire diversity of the games culture (Gamescom Asia).

The introduction of Gamescom Asia extends gamescom’s global reach, bridging cultural divides and introducing varied gaming experiences to a wider audience. This expansion reflects gamescom's commitment to globalizing the gaming experience and highlights its importance in shaping the global gaming landscape. Also, international games such as the Chinese game “Black Myth: Wukong” which faced a cultural challenge in appealing to Western audiences found a room at gamescom (Jijiashvili et al. 2023). Gamescom provided a platform for such titles to gain international exposure and test their appeal across different markets.

Rising Issues

In the recent history of gamescom, one of the most significant challenges has been its transition to a digital format. The 2021 iteration of gamescom, traditionally a physical event held in Cologne, Germany, was transformed into a digital-only affair. This transition was largely influenced by the global situation and the rising concerns about mass gatherings. A key issue faced by the digital version of gamescom was the lack of community feel, a hallmark of physical events (Batchelor 2021). This sentiment reflects the broader challenge of replicating the spontaneous and interactive nature of physical conventions in an online setting. The digital format, while beneficial in terms of accessibility, struggled to recreate the same level of engagement and interpersonal connections that are typically fostered in a physical space (Batchelor 2021).

To address these challenges, the organizers of gamescom implemented innovative solutions. One such initiative was Gamescom Epix, a gamified website designed to foster community interaction and engagement. This approach aimed to compensate for the absence of physical interaction by encouraging communal activities, such as completing quests to unlock digital 'loot.' Despite these efforts, the digital format posed its own set of challenges, especially in terms of discoverability and ensuring that attendees could easily navigate and explore the event's offerings (Batchelor 2021). These efforts underscore the ongoing evolution of gamescom as it adapts to changing circumstances and continues to innovate in the face of challenges.

Impact of gamescom at Cologne on the Video Game Industry

Gamescom's impact on the video game industry is multifaceted, encompassing both business-to-business (B2B) and consumer aspects. Gamescom 2023 attracted a remarkable "31,000 trade visitors, exceeding even the 28,000 who attended this year's GDC" (Jijiashvili et al. 2023). It highlights gamescom's pivotal role in industry networking and business development. This robust attendance underscores gamescom's significance in fostering B2B relationships and as a premier event for tech vendors, with more than 400 companies vying for developer attention.

On the consumer front, gamescom continues to be a major draw. According to Adam Bankhurst and Taylor Lyles, "IGN had a ton of games on our live show, including new gameplay and speaking to the teams behind...Lies of P, Off the Grid, Sky: Children of the Light" (Bankhurst and Lyles 2023). This diverse showcase reflects gamescom's role in influencing consumer trends and preferences, serving as a vital marketing and promotional platform for the industry. Based on CGMagazine's coverage, consumer feedback on gamescom 2022 appears to be overwhelmingly positive, despite some scaled-back elements. The article mentions, "Going into gamescom 2022, I already knew that this would be a somewhat scaled back edition... However... more than 265,000 visitors still gathered at the Koelnmesse" (Gafton 2022). This reflects that gamescom successfully attracted a significant audience even after two years of digital-only formats and amidst ongoing pandemic concerns.

-X.L., Fall 2023

References

Bankhurst, Adam and Lyles, Taylor. "The Biggest Announcements From gamescom 2023." IGN, August 28, 2023. Accessed December 12, 2023. https://www.ign.com/articles/gamescom-2023-everything-announced

Batchelor, James. "Taking Gamescom everywhere (when it can't be somewhere)." GamesIndustry.biz, August 25, 2021. Accessed December 12, 2023. https://www.gamesindustry.biz/taking-gamescom-everywhere-when-it-cant-be-somewhere

Gafton, Eduard. "GAMESCOM 2022: WHAT IT WAS LIKE TO ATTEND." CGMagazine, September 15, 2022. Accessed December 12, 2023. https://www.cgmagonline.com/articles/gamescom-2022-what-like-to-attend/

Game. "Gamescom." Game. Accessed December 12, 2023. https://www.game.de/en/events-and-partnerships/gamescom/

Gamescom. "Games Com." Accessed December 12, 2023. https://b2b.gamescom.global/

Gamescom Asia. “About Gamescom Asian.” Gamescom Asia. Accessed December 12, 2023. https://gamescom.asia/about/gamescom-asia/organisers

Jijiashvili et al. “Gamescom 2023: World's biggest games expo proves the value of physical events.” Game Developer, August 30, 2023. Accessed December 12, 2023. https://www.gamedeveloper.com/blogs/gamescom-2023-world-s-biggest-games-expo-proves-the-value-of-physical-events

Rousseau, Jeffrey. “320,000 attendees visited Gamescom 2023.” GamesIndustry.biz, August 28, 2023. Accessed December 12, 2023. https://www.gamesindustry.biz/320000-attendees-visited-gamescom-2023

SPIGEL. “Leipziger Messe: Games Convention setzt auf Onlinespiele.” SPIGEL, January 29, 2009. Accessed December 12, 2023. https://www.spiegel.de/netzwelt/spielzeug/leipziger-messe-games-convention-setzt-auf-onlinespiele-a-604284.html

SPIGEL. “‘GamesCom’: Die Games Convention geht nach Köln.” SPIGEL, Februrary 25, 2008. Accessed December 12, 2023. https://www.spiegel.de/netzwelt/spielzeug/gamescom-die-games-convention-geht-nach-koeln-a-537530.html

Takahashi, Dean. “Xsolla teams up with Devcom on year-long strategic partnership.” GamesBeat, June 18, 2021. Accessed December 12, 2023. https://venturebeat.com/games/xsolla-teams-up-with-devcom-on-year-long-strategic-partnership/

Trade Fair Dates. “Gamescom Cologne.” Trade Fair Dates. Accessed December 12, 2023. https://www.tradefairdates.com/gamescom-M696/Cologne.html

Gamestop

Overview

GameStop Corp. is a publicly traded retailer specializing in the sale of video game hardware/software for PC and console entertainment systems. The company is based out of Grapevine, Texas and has been a retail staple for all things gaming since the early 2000's. The companies rapid rise to the top of their industry has seen an equally steady decline in recent years as the brick-and-mortar concept of gaming retail is quickly becoming a thing of the past.

History

GameStop's initial iteration came in the form of Babbage's Etc. (named after an early computer pioneer, Charles Babbage) in the mid 1980's. The company served as a Dallas based chain specializing in gaming retail (Brustein 2015). In October of 1999 the book retailer, Barnes and Noble, purchased Babbage's for $215 million (Milliot 1999). In February of 2002 GameStop released its first public offering of the company raising $325 million with 18.06 million shares being sold at $18 per share. The company has since traded on the New York Stock exchange as GME (CNNMoney 2002).

Along with selling brand new games and consoles, GameStop specializes in purchasing back and reselling used games and hardware. The companies $162 million acquisition of FuncoLand in 2000 put them at the forefront of this strategy and their $1.5 billion purchase of EB Games in 2005 solidified them as one of the top dealers of new and used gaming goods. At their peak the company was shuffling through and repacking around 400,000 used games a week at their 180,000 square foot Texas compound and sending them back out for sale to their various retail stores (Brustein). While North America accounts for the majority of the companies business, 74.7%, they also have found success in Europe, 15.3%, Australia, 7.1%, and Canada 4.4% among others (MarketLine 2017).

The company saw their best success between 2003 and 2009 with a median annual earnings growth of 33% and a median revenue growth of 24% (Whitfield 2015). Brick-and-mortar expansion also saw a boom in this period with 388 new stores being built in 2009, 350 in 2010 and 285 in 2011 (Gentry 2012).

A core component of GameStop's business plan is their PowerUp Rewards loyalty program which launched in 2010. When members trade in games or make in store purchases they are allocated points to a individual card. As the points accrue members are able to trade them in towards the purchase of new games or products. The rewards system has obvious benefits for the consumer, but it also provides a key service for GameStop as well. Each member has an individual profile that is accessible to the company. Every purchase is tracked an accounted for

which enables the company to monitor purchasing habits of their consumers, segment which products work best for certain age demographics, all of which allows the company to keep a more efficient inventory by predicting consumer spending trends (Poggi 2012). As of 2015 the loyalty program had 30 million members who accounted for 75% of domestic revenues for the company (Dupré 2015).

Today

GameStop has seen a decline in productivity and sales in recent years. Looking at the companies YOY financial reports from 2016 - 2017 puts this into perspective. In the FY2017 GameStop's revenues tallied to US$8,607.9 million compared to US$9,363.8 million in FY2016. That's a 8.1% decline YOY. To break this down on a more micro level, the company saw a 28.2% decrease in hardware sales, 14.2% decrease in software sales and a 5.1% decrease in pre-owned and value video games (MarketLine). It should be noted that a contributing factor in the decline of hardware sales could be that the PS4 and Xbox 1 are nearing the end of their life cycles with new systems looming on the horizon. As GameStops troubles continue to accelerate they have been forced to close down "unproductive stores". In 2017 they announced that they would be shutting down between 150 - 225 retail locations throughout the year (Halkias 2017).

In the face of declining business the company has chosen to alter the inside of its retail space by allocating more square footage to display collectibles for sale. These items include action figures, lunch boxes lego sets, hats, t-shirts and more, all representing a game or specific character. The strategy has seen some success as the collectible category saw a 30%-40% jump in sales in 2017 (Swanson 2017).

In an effort to diversify, the company began purchasing a handful of wireless retailers, the biggest being AT&T's Spring Mobile in 2013 as well as Simply Mac which sells new, used and refurbished Apple products (Ligman 2013). While most of these acquisitions didn't pay off in the long run, as many have since completely shut down, Spring Mobile did. In November of 2018 GameStop sold Spring Mobile to Prime Communications LP for $735 million in cash (Thomas 2019a). The influx of cash gives the company more flexibility in determining its course of action going forward. Likely scenarios include reducing their massive $820 million of debt, half of which is due this year (Thomas 2019b), buying back stock in an effort to reduce dividend payouts to shareholders, or the seemingly unlikely scenario in which they reinvest in the company (Thomas 2019a).

In 2018 the sitting board members of GameStop announced that they would be looking into a possible sale of the company in an effort to maximize value of their stock for shareholders. After the announcement stocks saw an optimistic rise. Sycamore Partners seemed to be the most likely suitor (Halkias 2019), but in January of 2019 GameStop announced that it couldn't come to terms with any potential buyers and that they would be abandoning all efforts to sell the

company. In the immediate wake of the announcement stock prices plummeted by over 20% (Bloomberg 2019).

In the advent of digital purchasing platforms fewer and fewer consumers are making the trip to brick-and-mortar retailers and instead finding their titles on platforms such as Microsoft's *Xbox Games Store*, SONY's *PlayStation Store* as well as sites like *Steam* for PC gamers. There have been no official plans for console and PC gaming platforms to build in a trade-in-system for their digitally purchased games(although rumored). However, if this concept does manifest it will surely quicken the inevitable demise of retailers like GameStop. The newest manifestation in digitally downloadable games may be the scariest for companies like GameStop. Mobile gaming has quickly taken control of the industry with a value of $48.65 billion in 2017 and still growing (M2PressWire 2019).

The company's allure to gamers has seemingly been a mix of several factors. Their loyalty program was numerically a huge hit with consumers allowing them to generate value in their purchases by committing as a long-term, repeat customer. Also, their stores serve as a melting pot for like minded gamers to congregate and discus new releases and trends with educated and enthusiastic GameStop employees. However, the declining performance of the company as a whole is evidence that this enchantment has worn off and consumers are flocking to digital alternatives via console and PC. It seems that GameStop is headed towards a similar end as companies like Blockbuster who was also unable to survive this new age of accessible and convenient digital content.

-B.H., Spring 2019

References

Bloomberg. 2019. "GameStop Stock Plummets After Ending Effort to Sell Itself." *Fortune.Com*, January, 29. http://fortune.com/2019/01/29/gamestop-stock-sale/

Brustein, Joshua. 2015. "EXTRA Life." *Bloomberg Businessweek*, no. 4410 (January): 54–58.

CNNMoney. 2002. "GameStop Raises $325M." *CNNMoney*, February 12, 2002.

Dupré, Elyse. 2015. "IS IT GAME OVER OR GAME-ON FOR GAMESTOP?" *DM News* 37 (1) (02): 26-31.

Gentry, Connie Robbins. "GameStop Finds Digital Success." *Chain Store Age,* May 04, 2012. https://www.chainstoreage.com/news/gamestop-finds-digital-success/.

Halkias, Maria. 2018. "GameStop May Be in Talks with Buyout Firms, Including Sycamore Partners." *Dallas Morning News, The (TX)*, June 18.

Halkias, Maria. 2017. "GameStop to Close 150 to 225 Stores after Weaker Holiday Quarter." *Dallas Morning News, The (TX)*, March 24.

Ligman, Kris. 2103. "GameStop Nudges into New Markets with Spring Mobile Acquisition." Gamasutra. November 21, 2013. Accessed May 2019. http://gamasutra.com/view/news/205437/GameStop_nudges_into_new_markets_with_Spring_Mobile_acquisition.php.

M2PressWIRE. 2019. "Global Mobile Gaming Market Projections to 2026; Featuring Tencent, Nintendo, Com2uS, EA Mobile, Ubisoft, Supercell, and More."*M2PressWire* April 2019.

"MarketLine Company Profile: GameStop Corp." 2017. *GameStop Corp. MarketLine Company Profile*.

Milliot, Jim. 1999. "B&N to Acquire Babbage's Video, Software Chain." *Publishers Weekly* 246 (41): 10.

POGGI, JEANINE. 2012. "GameStop Revamps Business to Ensure Success in a Digital Future." *Advertising Age* 83 (15): 53.

Swanson, Jim. 2017. "The Bright Spot In GameStop: Collectibles." *Benzinga*, March 24.

Thomas, Patrick. 2019a. "GameStop Ends Plan to Search for a Buyer." *Wall Street Journal*, Jan 30.

Thomas, Patrick. 2019b. "As Videogame Market Shifts, GameStop Struggles to Boost Sales; With Sales Stagnating, Retailer Is Looking for Another CEO Again and Reviewing Strategic Alternatives." *Wall Street Journal,* January 3, 2019.

Whitfield, Paul. 2015. "GameStop Eludes Easy Definition." *Investors Business Daily*, October 27.

Vogel, M. W., 2017. Japanese Independent Game Development. [master's thesis] Georgia Institute of Technology. Accessed May 14, 2020. https://smartech.gatech.edu/handle/1853/58640/.

Gaming Furniture

Overview

Gaming furniture are ergonomic amenities designed to provide comfort for its users during long gaming sessions behind a computer or console. The furniture gives the users control over their comfort by making it easily adjustable and customizable to fit their ideal seating position or posture (Gordon 2021). Examples of gaming furniture include gaming chairs, desks, and accessories such as pillows, stands, pads, holders, and lighting equipment.
The gaming furniture industry has grown tremendously within the last decade, with gaming chairs (known for their race car-styled seats) being the industry's dominant product. The growing demand for gaming furniture ties closely with the ever-increasing popularity of home gaming and the trend of Esports and Twitch streaming (Business Insider 2021). The major brands in the gaming furniture industry are Secretlab, GT Racing, Corsair, DXRacing, Herman Miller, and Razer (Hill 2021).

History and Development

The roots of gaming furniture trace back to the origins of gaming chairs. Between the late 1980s and early 2000s, standard office chairs and compact chairs were used for game tournaments (Ramsey 2021). The chairs have minimal to no adjustability. Due to the fixed ergonomics of these chairs, prolonged sitting often caused back pain for its users. As the competitive gaming industry grew and players spent more time behind the screen, the number of back pain cases inevitably increased (Ramsey 2021).

In 1994, the *Aeron* ergonomic office chair was released by an American office and home furniture company, Herman Miller. Its ergonomics has adjustable features to support sitting postures in office environments, which later became an essential part of the gaming chair design (Hill 2021). The office chair included lumbar support, adjustable arms, arm-pads, backrest tilt, seat angle, and height adjustment. The *Aeron* chair was successful within the office furniture industry and received a considerable amount of recognition and awards, most notably the *Design of the Decade Gold Award* in 1999 (McMorrow Report 2004). However, its retail price of over $1000 created a high barrier of entry for general consumers and as a result, remained unnoticed in the competitive gaming industry.

In 2006, DXRacer, an American sports car seat manufacturer headquartered in Detroit, Michigan, released the "original gaming chair" (Schwartzberg 2017). DXRacer experienced an overstock of unsold car seats due to the inflation of oil prices in 2005 that plummeted the sales of gas-powered vehicles across the United States (Ramsey 2021). DXRacer eventually redesigned the ergonomics of their sports car seats and marketed them as gaming chairs. They added additional features to the car seats, including a removable neck and lumbar pillow, 3-D

adjustable armrests, adjustable height, backrest recline lever, padded seat, and a five-pointed base with caster wheels (Ramsey 2021). The end product was an "office chair with a faux-leather build, a high-back race car-style seat, and colorful patterns" (Gordon 2021). It allowed users to sit with a better posture and game comfortably for a longer duration of time. DXRacer's gaming chair design became the blueprint for all gaming chairs to follow (Gordon 2021). The price for gaming chairs today can range anywhere from $100 to $2000 based on the brand, trim level, material, and design.

ESports and Partnerships

Within the past decade, the ESports industry of competitive gaming has expanded exponentially and is still continuing to grow in size, with massive prize pools and millions of viewers watching. The 2021 global live streaming audience for games are expected to reach 728.8 million viewers, with Twitch and Youtube being the dominant streaming platform (Van Allen and Rousseau 2021). The boom of the ESports industry has drawn attention from viewers and investors. The 2021 global ESports market revenue is expected to reach $1.08 billion, which is a 14.5% growth from $947.1 million in 2020 (Van Allen and Rousseau 2021). Additionally, 77% ($833.6 million) of 2021's total revenue is expected to come from media rights and sponsorship (Van Allen and Rousseau 2021).

The rise of ESports and streaming platforms opened up business development opportunities for the gaming furniture industry. Gaming furniture companies provide sponsorship for tournaments and sign partnerships with professional gaming teams. ESports teams were outfitted with gaming chairs and desks specifically designed with their color theme and logo (Hyrliková and Nicholson 2021). Sponsorships and partnerships created global exposure for the teams and sponsors during the live streaming of these gaming events and tournaments. These opportunities enabled team sponsors to expand their brand to reach a broader audience by having "logos on jerseys and prime screen time" showcase professional players using the products (Taylor 2018, 178). Additionally, gaming furniture companies sign exclusive sponsorship and partnership agreements with various professional teams. Secretlab, a Singaporean gaming furniture company, has over 50 partnerships (Secretlab 2021). Some examples of Secretlab's partnerships include Cloud 9, G2, Team Liquid, Astralis, and Facebook Gaming (Secretlab 2021). In 2019, Secretlab was valued to be between $140-$220 million. Currently, their customer base expands to over 60 countries, with the North America region and the European Union contributing to 60% of the total global sales (Chan 2021).

Industry Transformation

The Covid-19 pandemic in 2020 diversified the customers of the gaming furniture industry. The "work-from-home arrangements" enlarged the traditional target market of gamers (Kit 2021). The demand for ergonomic gaming furniture skyrocketed as working professionals, students, and

non-gamers began to purchase them for their home setups. However, the industry could not keep up with the high demand due to the supply chain disruptions from the pandemic and the shortage of production materials (Kit 2021). As a result, Secretlab invested heavily in its research and development to innovate new strategies and expand its supply chain to accommodate the market disruptions and growth. In 2021, the company relocated its global headquarters to an industrial building in Braddell Road, Singapore, which spans over 44,000 square feet wide (Kit 2021). Secretlab also increased the size of its workforce by doubling the size of its product team and hiring additional roles in operation and marketing (Kit 2021).

New Entrants

The competition in today's gaming furniture industry results in new entrants continually trying to penetrate the growing market. Technology hardware companies partnered with brand furniture companies to innovate beyond the traditional gaming furniture design and market space. In 2020, the Swedish home furnishing company, Ikea, partnered with ASUS Republic of Gamers, a Taiwanese gaming hardware company, to enter the gaming furniture industry. The two companies developed a "new range of affordable gaming furniture and accessories" that disrupts the gaming furniture industry (Ikea 2020). They offer over 30 products in their catalog with items such as gaming chairs, desk, drawer, neck pillow, mouse bungee, and ring light (Ikea 2020). Ikea's gaming furniture offers a mix of simplicity and affordability without sacrificing quality. Similarly, Herman Miller partnered with Logitech, a Swiss computer peripherals company. Herman Miller believes that gaming furniture creates influence within the office and home environment and the customers are willing to invest more in ergonomic design to help ease their lifestyle (Highsnobiety 2021). By utilizing a combination of Herman Miller's expertise in ergonomics and Logitech's history in the gaming industry, they launched the *Herman Miller X Logitech G Embody* ergonomic gaming chair in the summer of 2020. The chair offers a minimalist design, retails for $1500, and aims to "redefine the gaming market" through high quality construction, performance, and ergonomics (Highsnobiety 2021).

-B.C., Fall 2021

References

Business Insider. "Ikea Gets in on the $180 Billion Gaming Market Through a Line of Furniture." Business Insider. February 5, 2021. Accessed December 11. https://www.businessinsider.com/ikea-asus-gaming-chair-republic-of-gamers-furniture-2021-2.

Chan, Lyn. "Secretlab shows no sign of abating in its quest to make the perfect gaming chair." Yahoo News. September 21, 2021. Accessed December 11. https://news.yahoo.com/secretlab-shows-no-sign-of-abating-in-its-quest-to-make-the-perfect-gaming-chair-032623159.html.

Gordon, Whitson. "Gaming chair guide: Expert shares how to buy a gaming chair." NBC News. January 13, 2021. Accessed December 11. https://www.nbcnews.com/select/shopping/buy-gaming-chair-guide-ncna1253990.

Highsnobiety. “Herman Miller Has Quietly Cornered the Luxury Gaming Chair Market.” Highsnobiety. May, 7, 2021. Accessed December 11. https://www.highsnobiety.com/p/highsnobiety-white-paper-gaming-jon-campbell-interview/.

Hill, Simon. “The Best Gaming Chairs of 2021.” Business Insider. February 23, 2021. Accessed December 11. https://www.businessinsider.com/best-gaming-chairs#here-are-our-top-picks-for-the-best-gaming-chairs.

Hyrliková, Henrieta, and Jonno Nicholson. “Team MCES unveils partnership with BX Gaming.” Esports Insider. November, 29, 2021. Accessed December 11. https://esportsinsider.com/2021/11/team-mces-unveils-partnership-with-bx-gaming/.

Ikea. “IKEA welcomes gaming home in collaboration with ASUS Republic of Gamers ROG.” About IKEA. September, 14, 2020. Accessed December 11. https://about.ikea.com/en/newsroom/2020/09/14/ikea-welcomes-gaming-home-in-collaboration-with-asus-republic-of-gamers-rog.

Kit, Tang S. “Secretlab to hire more than 100 employees in Singapore following 'massive growth.'” CNA. August 31, 2021. Accessed December 11. https://www.channelnewsasia.com/singapore/secretlab-hiring-jobs-massive-growth-headquarters-gaming-chair-2147501.

McMorrow Report. “Herman Miller's Mirra chair earns international design excellence award.” FMLink. July 7, 2004. Accessed December 11. https://www.fmlink.com/articles/herman-millers-mirra-chair-earns-international-design-excellence-award/.

Ramsey, Anil. “Complete history of gaming chairs: 2006-2020.” ChairsFX. May 13, 2021. Accessed December 11. https://chairsfx.com/gaming-chair-news/history-of-gaming-chairs/.

Schwartzberg, Lauren. “Ask the Strategist: What's the Deal With Gaming Chairs?” New York Magazine. July 21, 2017. Accessed December 11. https://nymag.com/strategist/article/ask-the-strategist-whats-the-deal-with-gaming-chairs.html.

Secret Lab. “Global partners | Secretlab US.” Secret Lab. Accessed December 11. https://secretlab.co/pages/partners.

Taylor, T.L. *Watch Me Play: Twitch and the Rise of Game Live Streaming*. N.p.: Princeton University Press. 2018. Accessed December 11.

Van Allen, Eric, and Jeffrey Rousseau. “Newzoo anticipates global esports market will grow to $1.08b in 2021.” GamesIndustry.biz. March 9, 2021. Accessed December 11. https://www.gamesindustry.biz/articles/2021-03-09-newzoo-anticipates-global-esports-market-will-grow-to-usd1-08b-in-2021

Google Stadia

Overview

Google Stadia was a cloud gaming service developed by Google and released on November 19, 2019. Utilizing Google's substantial data centers, the product was designed to stream high end console and PC games to Chromium-based web browsers, Chromecast Ultra TV dongles, and smartphones. The platform hosted a lineup of games produced by third-party publishers such as Ubisoft, Square Enix, and Bungie (Statt and Hollister 2019). Although Google initially intended to expand upon this selection via its in-house development team, Stadia Games and Entertainment, this studio was closed in February 2021 (Totilo 2021). Due to low sales and challenges maintaining an audience, Stadia was shut down in January 2023 (Peters and Cranz 2023).

Announcement and Marketing

Google Stadia was announced at the Game Developer's Conference in March 2019. It touted latency-free game streaming at resolutions up to 4K and 60 frames per second, as well as the ability to seamlessly switch between devices, regardless of hardware processing power. During the announcement of Stadia, Phil Harrison, general manager of the Stadia team, likened the product to YouTube, another subsidiary of Google, citing the platform's livestreams as an inspiration for the instant, download-free nature of the service (Google 2019).

Stadia was initially envisioned as the "Netflix of games" due to its novel streaming-based approach to software distribution (Statt and Hollister 2019). The video streaming service was an example of stratospheric growth in the entertainment distribution industry, having generated over fifteen billion dollars in 2018 (Netflix 2025). This analogy was complicated by the reveal of Stadia's storefront, in which consumers would be able to buy, rather than rent, individual games. Google's director of games, Jack Buser, stated that the company would "sell these games just like any other storefront" (Statt and Hollister 2019), indicating an early tension in the product between the typical subscription-based streaming revenue models and traditional games markets, which relied heavily on individual purchases of physical discs or software licenses.

Shortly after the initial announcement, Google unveiled their internal games development studio, Stadia Games and Entertainment. With bases in Montreal and Los Angeles, the studios would focus on first party, Stadia-exclusive games. The studio's games would take advantage of Google's superior, centralized hardware as opposed to the user's, allowing them to pioneer "more detailed simulations, more advanced AI behaviors, or MMO-like experiences that redefine 'massively multiplayer,'" according to head of studio Jane Raymond. Furthermore, the studio would incorporate Google's non-gaming technology, using Google AI to enliven non-player characters in story-based games. (Sinclair 2019). Despite not announcing any games prior to Stadia's launch, the approximately 150-employee studio promised a constant stream of software support, beginning soon after the service's release (Totilo 2021).

Release and Reception

Stadia released worldwide on November 19, 2019. It cost $130 and contained a Chromecast Ultra TV dongle and the Stadia controller, both of which were developed by Google. In addition to the price of the bundle, a $10-per-month Stadia Pro subscription containing access to free games, discounts on games, and 4K resolution was available (Statt and Hollister 2019). Separately, the product featured a storefront of premium games, such as *Assassin's Creed Odyssey* and *Borderlands 3* (MobyGames 2023).

Despite the heavy price of investment, several features advertised at the announcement, such as the ability to click on a video-embedded YouTube link to be taken into the game, were absent at launch, leading to a strained release. Players who preordered the system received the Founder's edition, which contained an exclusive controller colorway and a Buddy Pass allowing them to give three months of Stadia access to another user. However, this feature was also unavailable upon release (Statt and Hollister 2019). Despite being promised, also absent were Bluetooth headphone support, in-game achievements, 8k resolution, and several social features (Hollister 2019).

Initial reviews were mixed, leaving many critics optimistic about the possibilities of cloud gaming but doubtful that Stadia lived up to the medium's potential (Tamayo 2025). The platform struggled to gain traction, reaching only 175,000 active monthly users in 2019 (History Tools 2024).

Pivot to Free Model and Closure of Internal Studios

Amidst challenging sales, Google adjusted their sales tactics in early 2020, promoting their free tier and including three free months of Stadia Pro upon account creation. The service's compatibility was improved, expanding support to iOS devices through a web application.The company purchased Typhoon Studios, a Montreal-based studio preparing to release its first game. (Batchelor 2022). These changes, along with a growing number of third party games, led to an influx of consumers, bringing the monthly active user count to 750,000 (History Tools 2024). Despite this, the service was unprofitable. Google Cloud, the company's cloud infrastructure and platform service division containing Stadia, lost 5.6 billion in revenue in 2020 (Lardinois 2021), and the install base was drastically below the company's estimates. Considering the high operating costs of sustaining cloud architecture, alongside the estimated hundreds of millions Google was investing in game studios and marketing, the limited revenue streams Stadia provided were unable to turn a profit (History Tools 2024).

In February of 2021, Google shut down its internal game development studios: Stadia Games and Entertainment and Typhoon Studios. Neither studio had released an exclusive game for the system. Phil Harrison described the shutdown as an effort to transition Stadia into a third-party distribution platform, calling the closure an "important opportunity to work with partners seeking a gaming solution all built on Stadia's advanced technical infrastructure and platform tools" (Totilo 2021).

End of Service and Impact of Stadia

Despite Google's renewed focus on publishing third-party titles, Stadia continued to fall short of expectations. Although the company was prepared to spend hundreds of millions to acquire major titles like *Cyberpunk 2077* and *Red Dead Redemption 2,* its inexperience in the games industry, particularly in managing development teams, was a continual obstacle. The founders of Typhoon Studios stated that Google lacked the "level of investment required to reach scale" and that video game development "just wasn't their core business" (Game Developer 2023). In an interview with Wired, another ex-Stadia employee questioned Google's "overcommitments and the inability to keep those commitments" (D'anastasio 2021). Google was also facing mounting pressure from competing cloud services, most notably GeForce Now and Xbox Cloud Gaming, both of which used normative streaming subscription models (Barker 2024). In July 2021, Google announced an updated revenue sharing model with developers, reducing their share of profits from a standard 30 percent to 15 percent and giving 70 percent of Stadia Pro Revenue to developers that add their games to the service (McAloon 2023). However, these changes were largely ineffective, and failed to reverse the decline of the platform (Batchelor 2022).

After an announcement of closure in September 2022, Google Stadia was shut down on January 18, 2023. Refunds were issued to consumers, and the Stadia controller was given an update to enable Bluetooth compatibility with PCs and mobile devices. Phil Harrison said of the closure, "While Stadia's approach to streaming games for consumers was built on a strong technology foundation, it hasn't gained the traction with users that we expected" (Peters and Cranz 2022). Ultimately, Google was unable to maintain a significant presence in the games industry with Stadia, despite massive funding and substantial data centers. Overspending, mismanagement, a lack of exclusive games, and a complicated business model led to the system's demise. Google does not currently have any plans to reenter the games market (Strickland 2025).

-T.S., Fall 2025

References

Barker, Shane. "The True Cost of Google Stadia: A Deep Dive into Cloud Gaming Economics - ExpertBeacon." expertbeacon.com, October 1, 2024. https://expertbeacon.com/the-true-cost-of-google-stadia-a-deep-dive-into-cloud-gaming-economics/.

Batchelor, James. "The Rise and Fall of Stadia." GamesIndustry.biz, October 6, 2022. https://www.gamesindustry.biz/the-rise-and-fall-of-stadia.

D'Anastasio, Cecilia. "How Google's Grand Plan to Make Its Own Games Fell Apart." Wired, February 26, 2021. https://www.wired.com/story/google-stadia-games-entertainment-collapse/.

Game Developer Staff. "Google Scrapped Stadia Studios Due to 'level of Investment Required to Reach Scale,' Say Ex-Stadia DEVS." Game Developer, October 8, 2023. https://www.gamedeveloper.com/business/google-scrapped-stadia-studios-due-to-level-of-investment-required-to-reach-scale-say-ex-stadia-devs.

Google. "Stadia GDC 2019 Gaming Announcement." YouTube, March 19, 2019. https://www.youtube.com/live/nUih5C5rOrA?si=E3ApXlxJdspFwgU9.

History Tools. "The Rise and Fall of Google Stadia: A Deep Dive into the Cloud Gaming Pioneer's Journey - History Tools." History Tools, March 31, 2024. https://www.historytools.org/docs/google-stadia-is-shutting-down.

Hollister, Sean. “The World Is Waiting for Google Stadia to Flop.” The Verge, November 14, 2019. https://www.theverge.com/2019/11/14/20964386/google-stadia-pre-launch-editorial-cloud-gaming.

Hollister, Sean. “Google Stadia Review: The Best Of Cloud Gaming Is Still Just a Beta.” The Verge, November 18, 2019. https://www.theverge.com/2019/11/18/20970297/google-stadia-review-gaming-streaming-cloud-price-specs-features-chrome-pixel.

Lardinois, Frederic. “Google Cloud Lost $5.6B in 2020.” TechCrunch, February 2, 2021. https://techcrunch.com/2021/02/02/google-cloud-lost-5-6b-in-2020/.

McAloon, Alissa. “Stadia to Give Devs a Cut of Stadia Pro Revenue (Based on How Often Their Game Is Played).” Game Developer, October 8, 2023. https://www.gamedeveloper.com/business/stadia-to-give-devs-a-cut-of-stadia-pro-revenue-based-on-how-often-their-game-is-played-.

MobyGames. “List of All Stadia Games.” MobyGames, 2023. https://www.mobygames.com/platform/stadia/.

Netflix. Netflix - financials - Annual reports & proxies. Accessed December 5, 2025. https://ir.netflix.net/financials/annual-reports-and-proxies/default.aspx.

Peters, Jay, and Alex Cranz. “Google Is Shutting down Stadia.” The Verge, September 29, 2022. https://www.theverge.com/2022/9/29/23378713/google-stadia-shutting-down-game-streaming-january-2023.

Sinclair, Brendan. “Google Is Making a ‘Spectrum of Bets’ on Stadia Content.” GamesIndustry.biz, October 24, 2019. https://www.gamesindustry.biz/google-is-making-a-spectrum-of-bets-on-stadia-content.

Statt, Nick, and Sean Hollister. “Google’s Stadia Cloud Gaming Service Is Coming November 19th: Everything You Need to Know.” The Verge, June 6, 2019. https://www.theverge.com/2019/6/6/18654632/google-stadia-price-release-date-games-bethesda-ea-doom-ubisoft-e3-2019.

Strickland, Derek. “Rushing to Market, Overspending, & Mismanagement Killed Google Stadia.” Tweaktown. Accessed December 5, 2025. https://www.tweaktown.com/news/78024/rushing-to-market-overspending-mismanagement-killed-google-stadia/index.html.

Tamayo, Paul. “Google’s Stadia Just Ain’t It [Updated].” Kotaku, July 11, 2025. https://kotaku.com/google-s-stadia-just-ain-t-it-1839930224.

Totilo, Stephen. “Google Stadia Shuts down Internal Studios, Changing Business Focus.” Kotaku, July 11, 2021. https://kotaku.com/google-stadia-shuts-down-internal-studios-changing-bus-1846146761.

Happy Elements

Overview

Founded in 2009, Happy Elements is a well-known interactive entertainment company in Asia, with game development and operation as its main business, and animation works, licensed commodities, concerts, radio dramas, and other businesses included. By the end of 2021, Happy Element had over 700 employees, headquartered in Beijing, with offices and R&D centers in Tokyo, Shanghai, and Kyoto. The company has launched several long-running bestselling games on mobile platforms like *Dream Aquarium, Happy Crush, Merc Storia*, and *Ensemble Stars* over the years. By 2022, Happy Elements had produced a total of 15 games and attracted over a hundred million players.

Founding

In July 2009, Haining Wang, the senior director of the value-added business department of Renren, left Renren and established the original predecessor of Happy Element with his former colleagues: Two Fishes. The company was founded by Haining Wang and six others, who raised 500,000 RMB in total. The original goal was to be a social game company with the core value of "making games that everyone can play." Under these values, Two Fishes released three major products on the PC platform between 2009 and 2011: Dream Aquarium, My Bar, and My Kingdom. All three games were successful. Among them, Dream Aquarium was the most popular one, which was launched on Facebook and reached a peak of 2.4 million daily users in November 2009, making it a top 10 game on Facebook (Beilei Chen, 2018).

With the success of these three games, Two Fishes has accumulated certain popularity among game players nationally and globally. In 2012, in order to keep up with the development of mobile games and the pan-entertainment market, Haining Wang acquired Lefeng Dream and began to launch mobile games for Chinese users. In August 2013, the PC version of Happy Crush was launched in QQ Game, and the iOS and Android versions were subsequently launched at the beginning of 2014. Within one-year, Happy Crush grew from 1.8 million to 1 million monthly active users on PC and mobile platforms, reaching a peak of 142 million in the first quarter of 2016 (Yan Li, 2017).

Since 2014, the company has divided its main business into three sections: the Development and Operation of mobile games, Sales of game merchandise, and Game IP authorization. In addition, it has launched several new games, such as the mobile version of Dream Aquarium, Merc Storia, Ensemble Stars, etc. Among them, Merc Storia earned 156 million yuan in 2015, accounting for 14 percent of the company's total revenue that year, and Ensemble Stars reached 310 million yuan in 2016, accounting for 16.79% of the total revenue (Yan Li, 2017).

On February 20, 2017, the company officially changed its name to Happy Elements Limited, and the registered capital changed to 38 million yuan (Jianping Lei, 2017). By the end of 2022, the

IPO application for Happy Elements has been reviewed. For the first 13 years of the company, Happy Elements successfully transformed from developing social games to recreational games, from focusing on the computer platform to the mobile platform, and from a Facebook game developer to one of the leading game companies in Asia.

Female-oriented Games

Instead of choosing Match-3 game, the current mainstream game genre in Asia, Happy Elements pick female-oriented games as its core track. According to Happy Elements' team structure information released at the end of 2021, the average age of Happy Elements' employees is 29; 51% of its staff are artists, 22% are programmers, 22% are designers, and women make up 56% of the staff (GameLook, 2022). This is an incredible phenomenon in the male-dominated Asian gaming industry, but it may be one of the reasons why Happy Elements has managed to create a high-popularity female-oriented game---Ensemble Stars.

As an essential segment of the 2D mobile game market, female-to-2D products have seen explosive growth in the past few years, such as A3!, 100 Sleeping Princes & the Kingdom of Dreams, etc. Unlike other female-oriented games focusing on love stories, Ensemble Stars is set in the background of Japan's thriving idol culture and assisted by the gameplay of the rhythm game, which forms a clear distinction from pure love story games. As one of the most important IPs of Happy Elements, Ensemble Stars contained a million-word story written by famous novelist Akira, featuring 14 idol groups, 49 male characters with different personalities, nearly 200 fine cards, and 50 top voice actors such as Kaji Yuuki, Hikaru Midorikawa, and Yūki Ono, showing that the company has made many efforts to target female players. The most surprising part of the game is that Ensemble Stars realizes the upgrade from live2D to live3D and brings the characteristic concert gameplay. More than 50,000 exquisite models, the natural capture of live action, the freshness of monthly song updates, and the freedom to arrange group compositions and costumes, all together give Ensemble Stars an extremely high popularity and excellent reputation in the female-oriented game market.

Exploring the potential of IP

To a large extent, the reason for the popularity of Ensemble Stars in Asia should be attributed to the localization strategy of China, Japan, and South Korea based on the highly developed market demand of multiple subcultures, such as the second dimension, female orientation, and idol cultivation. Despite being a relative niche field, Happy Elements set the stage from the beginning to make Ensemble Stars more of an IP than a game.

In the past, IPs mainly included novels, comics, animation, and garage kit, but Ensemble Stars has involved a series of derivative content such as CD albums, stage play, and offline concerts, which has brought a richer IP experience and enhanced the influence of IP. Different from the general two-dimension project, the unique nature of the idol project enables it to obtain higher economic benefits and broader social communication through offline activities and sales. Take the most representative offline performance as an example. In 2017, the first CG concert of Ensemble Stars was held in the largest livehouse in Tokyo, with a live audience of more than 1,000. The concert then completed its tour of Tokyo, Osaka, Nagoya, and Sendai, with a cumulative audience of more

than 30,000. Today, Dream Live 3D holographic projection concert has been held for the 5th time; The Starry Stage of voice actors has held its third concert. Meanwhile, the sales volume of Ensemble Stars reached 10 billion yen in 2017(GameLook, 2020). The following year, related music CDs ranked fourth and fifth in sales at Animate stores, making them one of the most popular game accessories. As of June 2022, Ensemble Stars has sold more than 51 music CDs in total, among which 37 CDs have been ranked among the top ten in Japan's Oricon Albums Chart , and it can be regarded as the top IP of the Japanese Idol mobile game market.

"Ensemble Stars is not only a game, but also a novel, music and animation from a certain point of view. "(Haining Wang, 2017) Now, the five-year-old Ensemble Stars is no longer limited to mobile games but is spreading to a wider field of pan-entertainment, connecting more players. In this process, Happy Elements became more skilled in creating game IP, and began to shape all its owned games step by step, through the multidimensional form, into a full range of influential IPs.

-I.S., Fall 2022

References

Chen, Beilei. "The other side of the game," Chinese Entrepreneur, 2018, pp. 29–31.

Li, Yan. "Happy Elements make happy models," Business China, " 2017, pp. 83–85.

Lei, Jianping. "Happy Element Sprint for IPO: Single quarter revenue of 600 million yuan relying on Happy Crush," August 16 2017, https://www.sohu.com/a/165148826_430392.

GameLook. "Happy Element Japan subsidiary's net profit reach 300-million-yuan last year, female employees accounted for half, become a model of the game export!," March 24 2022, http://www.gamelook.com.cn/2022/03/477087.

GameLook. "It earns more a billion dollars a month, but I wouldn't call it a game," December 30 2020, http://www.gamelook.com.cn/2020/12/410203.

Wang, Haining. "CEO of Happy Elements Haining Wang: an idealist on the dunes.," Chule Media, 10 Jan. 2017, https://www.chuapp.com/?c=Article&a=index&id=281939.

Mobile Game News. "Happy Element's New Work, Chose a Track That Has Never Been Done Before." 27 July 2022, http://www.nadianshi.com/2022/07/325049.

Hipster Whale

Overview

Hipster Whale Pty Ltd is a game developer and publisher based in Melbourne, Australia. Founded by Matt Hall and Andy Sum in November 2014, the small independent company is famous for developing the *Crossy Road* franchise and other light-hearted-themed leisure mobile games like *Shooty Skies*, *PAC-MAN 256*, and *Piffle*. Hipster Whale was the winner of Studio of the Year in the 2015 Australian Game Development Awards and the finalist of the Creative Industries Award in the 2015 Australian Export Awards (Hipster Whale Press Kit, n.d.).

History

Hall and Sum first met each other at the GCAP conference in Melbourne in 2013. Sitting in a room and listening to the discussion of free-to-play and whale haunting, Sum scribbled a whale on paper while Hall "made it a hipster with a cup of coffee, a little hat and a goatee," and thus came the name and the idea of "Hipster Whale" (Patridge 2016). Both of them found the drawing funny. For Sum, Hipster Whale symbolizes a "mid point between two forms" of making video games as a business and a creative expression (Patridge 2016). Hipster Whale came into existence in a half-joking way. Its story of origin set the keynotes of the video games they developed: fun, quirky, and simple. The common concept and goal that the two founders shared in making video games – games that are inclusive and can be shared by everyone – led to the development of their legendary debut – *Crossy Road* (GameAnalytics, n.d.).

Hipster Whale Logo (Crossy Road Press Kit, n.d.)

Crossy Road: An Instant Hit

Why did the chicken cross the road? *Crossy Road* took a spinoff of this old joke. It is an endless runner game where the players control their avatars (classically a chicken) to cross as many roads as possible by avoiding being hit by cars and trains or drowning in the river. Made in 8-bit pixel style with a tilted camera angle, *Crossy Road* encourages its players to "collect over 150 retro-styled, pop art inspired characters" through a loot box system using the coins gained in gameplay (Crossy Road Press Kit, n.d.).

The game was largely inspired and influenced by *Flappy Bird*. This endless arcade game experienced a sudden rise in popularity in early 2014 and was removed from all platforms by its creator shortly after it had gone viral. Both Sum and Hall were intrigued by the popularity of Flappy Bird but did not want to make a clone of it. “We wanted to make something in the spirit of Flappy Bird rather than recreate it,” said Hall in the GDC Vault talk, who noticed some key factors of Flappy Bird’s success: the purity in its score system and the willingness of people to share the game and challenge their friends with best scores. So the developing team combined the spirit of *Flappy Bird* and the form of *Frogger*, a classic arcade game developed in 1981, and spent 12 weeks creating their own hopper game – *Crossy Road*.

Officially launched in the App Store (later on Google Play and the Amazon Appstore as well) on November 20th, 2014, Crossy Road was a F2P mobile game that immediately became a hit. Within the first week of its release, the game quickly became one of the top 10 downloaded games in the U.S. App Store and remained within the top 40 ranks for over a year (Seufert 2015). *Crossy Road* has won multiple Best of 2014 awards across different categories and channels and the Apple Design Award in 2015. The huge success even surprised its own game developers: Matt Hall admitted that “by release, we thought we had a very strong game, but I don’t think we expected it to stay in the top charts for so long” (Rad 2015).

Monetization Model

Like most F2P games, Crossy Road generates profit from in-app purchases and advertisements. However, instead of trying hard to convert players into paid customers and diving into whale-haunting, Hipster Whale insisted on a user-friendly monetization model, where players are not obligated to spend money to progress in the game, and prioritized the game experience and user retention over monetization. Inspired by *Dota 2*, where players could spend money on cosmetics that do not affect gameplaying, Hipster Whale came up with collections of avatars in *Crossy Road* that offered slightly different experiences but did not affect the scoring (Patridge 2015). “We really wanted to make sure it was a pure experience,” Matt Hall stated “[T]he number one goal was retention. Having people play and not wanting to leave for any reason. So we took the bare minimum approach with monetisation and advertising” (Partridge 2016). Hipster Whale emphasized the inclusiveness of the game and strived to reach audiences as broad as possible by eliminating paywall and intrusive ads, and this unusual monetization model had brought in $10 million from 50 million downloads (Tach, 2015). Hipster Whale continued to make F2P games and use ads as economic support after *Crossy Road*,

Collaborations and Other Games

After launching *Crossy Road*, Hipster Whale continued to develop and publish leisure games with its sister studio Mighty Games, another indie game studio in Melbourne. Working together as developers and publishers, the two studios made *Shooty Skies* in 2015 and *Piffle* in 2018, both

being bright, funny, and easy-to-play games. Besides iOS and Android, *Shooty Skies* is also available on PC, and *Piffle* is also available on Nintendo Switch.

In 2015, Hipster Whale collaborated with BANDAI NAMCO to produce a new game in the PAC-MAN series called *PAC-MAN 256* in celebration of the game's 35th anniversary. This version of PAC-MAN was inspired by the glitches that appeared in the original game when the player reached map 256. Hipster Whale took the infamous glitches and turned the game into an endless maze game (Hamilton, 2015).

In 2016, Hipster Whale collaborated with Disney and developed *Disney Crossy Road* on mobile platforms. This game contains popular characters from Disney and Pixar animated movies in 8-bit retro-style. However, for no specified reason, *Disney Crossy Road* was shut down on March 20th, 2020, despite its popularity.

Hipster Whale also partnered with Apple Arcade by launching two *Crossy Road* spinoffs exclusively for the platform, which costs $4.99/mo as a subscription fee. On February 28th, 2020, Hipster Whale officially joined the Apple Arcade family with the game *Crossy Road Castle*. Having the same character collections as the original *Crossy Road*, this game mimics *Super Mario Bros.* and allows multiple players to play simultaneously. "This game is about the potential for social interaction -- like real human-to-human interaction," according to Clara Reeves, the CEO of Hipster Whale, who wanted to break the stereotype of video games being antisocial (Hiner, 2020). Hipster Whale also launched *Crossy Road* +, another spinoff of Crossy Road that added the feature of Crossy Road Park, on Apple Arcade, October 8th, 2021. The recent partnership between Hipster Whale and Apple envisioned a new monetization model for the studio who used to believe solely in the F2P model.

-W.C., Fall 2021

References

"Crossy Road Press Kit." Crossy Road - Endless Arcade Hopper Game. Accessed December 11, 2021. https://www.crossyroad.com/crossy-road-classic-press-kit.

"Crossy Road: A Whale of a Time." GDC Vault. Accessed December 11, 2021. https://www.gdcvault.com/play/1021897/Crossy-Road-A-Whale-of.

Hamilton, Kirk. "Pac-Man 256 Is Endless Pac-Man with a Fun, Glitchy Twist." Kotaku. Kotaku, August 21, 2015. https://kotaku.com/endless-pac-man-is-really-fun-even-though-you-can-neve-1725723440.

Hiner, Jason. "Crossy Road Castle Is Super Mario Bros. for 2020, but with Friends." CNET. CNET, February 28, 2020. https://www.cnet.com/tech/mobile/crossy-road-castle-reimagines-super-mario-bros-as-a-multiplayer-extravaganza-on-apple-arcade/.

"Hipster Whale Case Study." GameAnalytics. Accessed December 12, 2021. https://gameanalytics.com/case-studies/hipster-whale.

Hipster Whale. Accessed December 11, 2021. https://www.hipsterwhale.com/.

Patridge, Jon. "Crossy Road: Making the next Flappy Bird." redbull.com, July 28, 2016. https://www.redbull.com/us-en/crossy-road-hipster-whale-interview.

Rad, Chloi. "Why Did the Chicken... The Making of Crossy Road." pocketgamer.biz, February 18, 2015. https://www.pocketgamer.biz/feature/60837/making-of-crossy-road/.

Seufert, Eric. "Crossy Road: A Case Study in Mobile Ad Monetization." Mobile Dev Memo, April 13, 2015. https://mobiledevmemo.com/crossy-road-a-case-study-in-mobile-ad-monetization/.

Tach, Dave. "They Wanted to Make a Phenomenon. They Made $10 Million. the Story of Crossy Road." Polygon, March 4, 2015. https://www.polygon.com/2015/3/3/8142247/crossy-road-earnings-10-million-gdc-2015.

Humble Bundle

Overview

Humble Bundle is a digital distribution storefront that sells primarily video games. They are known for donating a portion of proceeds to charity. The original "Humble Bundle" was released in May 2010, and was created by Jeffrey Rosen and John Graham. It consisted of various indie games including *World of Goo, Penumbra: Overture, Aquaria, Gish, and Lugaru*, and people were encouraged to pay what they wanted for the whole collection. Buyers spent over one million dollars on the bundle (Duncan 2010). In March of 2019, it was revealed that founders Jeffrey Rosen and John Graham had stepped down from their positions of CEO and COO, respectively, citing that they are "more startup kinda guys" (Handrahan 2019).

The company has since expanded to a digital storefront called the Humble Store, as well as offering digital media in a bundle format at a heavily discounted price. Humble Bundle also provides a publishing service for indie games. In October 2017, it was announced that Humble Bundle was being acquired by IGN, a gaming and entertainment outlet, with founder Jeff Rosen stating, "We chose IGN because they really understand our vision, share our passion for games, and believe in our mission to promote awesome digital content while helping charity" (Sarkar 2017).

Humble Store

The Humble store sells a variety of games for PC, Mac, and Linux, that can be redeemed on Battle.net, GOG, Steam and Uplay, as well as games for the Nintendo 3DS and Switch beginning in 2019 (Stevens 2019). They have also partnered with Epic Games to sell games, including exclusives, redeemable through the Epic Games store (Batchelor 2019). Additionally, the store has a selection of DRM-free games. Humble Bundle takes a 25% cut in the sale of a game. In comparison, Epic Games takes a 12% cut, and Steam takes 30%, dropping to 25% after $10 million is earned, and to 20% after $50 million earned (Marks 2019). They also provide developers with the "Humble Widget" which can be embedded into one's website to sell games through the Humble Store for just a 5% fee (Dillet 2013).

Bundles

Humble Bundle provides a variety of different bundles that contain games, books, audiobooks, comics, and software at a highly discounted price. Their pay-what-you-want indie game bundle was what started it all. In May 2020, the Humble Indie Bundle 21 was released, roughly ten years after the first one. These bundles typically operate in three tiers. The first tier costs one dollar or more and unlocks three games. The second tier requires buyers to pay more than the average, and unlocks the previous tier as well as additional games. Finally, fifteen dollars or more unlocks all previous tiers as well as two more games (Devore 2020). Weekly bundles as well as flash bundles that last 24 hours operate in a similar tiered fashion and typically include bundles of media and software outside of games (Gedevanishvili 2014).

There is also a monthly bundle. The original Humble Monthly bundle cost twelve dollars a month for a selection of games, usually with a couple more well-known titles that were revealed

earlier. In late 2019, this was replaced with Humble Choice. Humble Choice remains a monthly bundle, however, customers are able to choose a number of games from a larger selection each month. The basic plan costs fifteen dollars a month which allows one to keep three games. The premium plan costs twenty dollars and nine games can be selected. Those subscribed to the original monthly bundle were able to continue paying twelve dollars a month for a "classic" subscription plan, in which they could keep ten games, as long as they stayed subscribed. All of these subscriptions also come with discounts to the Humble Store, 10% off for the basic plan and 20% off for premium and classic, as well as access to the Humble Trove. The Humble Trove is a growing library of DRM-free games, currently containing over ninety games. Additionally, there is a lite plan for five dollars a month that includes just 10% off the store and access to the Trove. All of these plans can be purchased at a slightly discounted rate when buying a yearly subscription (Horti 2019). As of April 2019, the classic bundle had over 400,000 subscribers (McAloon 2019).

Charity

As of 2019, Humble Bundle has raised over $150 million for charity through their storefront and various bundles. The charities they have donated to include War Child, GamesAid, Make a Wish, Save the Children, World Wildlife Fund, the American Red Cross, and many more. Each month the site chooses a specific charity to feature (Kerr 2019). When making a purchase on the Humble Store, customers have the option to donate ten percent of the revenue from the purchase to a charity of their choice, add it to their Humble Wallet to use for future purposes, or a combination of the two. In April 2020, Humble Bundle released a "Conquer COVID-19" bundle for thirty dollars with the option of paying more, and it contained over a thousand dollars worth of games, ebooks, comics, and software. All proceeds were donated to COVID-19 relief programs, and with over 200,000 bundles being sold, a total of $6,565,557 was raised for charity (Bolding 2020).

Publishing

The company's growth led Humble Bundle to provide funding into the development and release of "Humble Originals," which are indie games made exclusively for the monthly bundles. The first game they funded was *Elephant In the Room* by Mighty Rabbit Studios (Wawro 2016). In 2017 they expanded to multiplatform publishing. These games were published under the "Presented by Humble Bundle" label, and among the first games to sign on are *A Hat in Time, HackyZack, Ikenfell, Keyboard Sports, No Truce with the Furis, Scorn, and Staxel.* Developers are given a choice in services in which Humble Bundle is to help them with, and can work with a variety of platforms (Batchelor 2017). In May 2020, Humble Bundle announced the rebranding of their game publishing business to Humble Games, with the goal of supporting indie developers. They released an overview, stating, "With a dedication to gamers and developers alike, Humble Games is a publisher willing to challenge the norm that has been expected of its predecessors. More games. Better games. Fairer deals. All while prioritizing social impact and social good" (Romano 2020).

-W.L., Spring 2020

References

Batchelor, James. “Epic Games Store Line-up Expands with Private Division ...” Gamesindustry.biz, March 20, 2019. Accessed May 15, 2020. https://www.gamesindustry.biz/articles/2019-03-20-epic-games-store-line-up-expands-with-private-division-more-ubisoft-titles-and-quantic-dream-exclusives.

Batchelor, James. “Humble Bundle Launches Multiplatform Publishing Business ...” Gamesindustry.biz, February 10, 2017. https://www.gamesindustry.biz/articles/2017-02-10-humble-bundle-launches-multiplatform-publishing-business.

Bolding, Jonathan. “Humble Bundle Has Raised $6.5 Million for COVID-19 Relief.” pcgamer. PC Gamer, April 27, 2020. Accessed May 15, 2020. https://www.pcgamer.com/humble-bundle-has-raised-dollar65-million-for-covid-19-relief/.

Devore, Jordan. “Humble Indie Bundle 21 Marks Ten Years of Name-Your-Price ...” Destructoid, May 12, 2020. Accessed May 15, 2020. https://www.destructoid.com/humble-indie-bundle-21-marks-ten-years-of-name-your-price-deals-590731.phtml.

Dillet, Romain. “Humble Bundle Goes Head To Head Against Steam With The New ...” Tech Crunch, November 11, 2013. Accessed May 15, 2020. https://techcrunch.com/2013/11/11/humble-bundle-goes-head-to-head-against-steam-with-the-new-humble-store/.

Duncan, Alasdair. “Interview: Jeff Rosen of the Humble Indie Bundles.” Destructoid, October 11, 2010. Accessed May 15, 2020. https://www.destructoid.com/interview-jeff-rosen-of-the-humble-indie-bundles-213429.phtml.

Gedevanishvili, Dimitri. “Flash Sales Return To Humble Bundle.” Game Informer, July 14, 2014. Accessed May 15, 2020. https://www.gameinformer.com/index.php/b/news/archive/2014/07/14/flash-sales-return-to-humble-bundle.aspx.

Handrahan, Matthew. “Humble Bundle Co-Founders Stepping down after Best Year Ever.” GamesIndustry.biz, March 29, 2019. Accessed May 15, 2020. https://www.gamesindustry.biz/articles/2019-03-29-humble-bundle-exclusive.

Horti, Samuel. “Humble's Monthly Bundle Is Getting More ... - PC Gamer.” PC Gamer, October 20, 2019. Accessed May 15, 2020. https://www.pcgamer.com/humbles-monthly-bundle-is-getting-more-expensive-but-youll-get-to-choose-your-games/.

Kerr, Chris. “Humble Has Raised $150M for Charity through Bundles and Storefront.” Gamasutra, June 25, 2019. Accessed May 15, 2020. https://www.gamasutra.com/view/news/345470/Humble_has_raised_150M_for_charity_through_bundles_and_storefront.php.

Marks, Tom. “Report: Steam's 30% Cut Is Actually the Industry Standard.” IGN. IGN, January 14, 2020. Accessed May 15, 2020. https://www.ign.com/articles/2019/10/07/report-steams-30-cut-is-actually-the-industry-standard.

McAloon, Alissa. “Humble Monthly Now Has over 400,000 Subscribers.” Gamasutra, April 1, 2019. Accessed May 15, 2020. https://www.gamasutra.com/view/news/339859/Humble_Monthly_now_has_over_400000_subscribers.php.

Romano, Sal. “Humble Bundle Games Publishing Business Rebranded Humble Games.” Gematsu, May 14, 2020. Accessed May 15, 2020. https://www.gematsu.com/2020/05/humble-bundle-games-publishing-business-rebranded-humble-games.

Sarkar, Samit. “IGN Acquires Humble Bundle (Update).” Polygon. Polygon, October 13, 2017. Accessed May 15, 2020. https://www.polygon.com/2017/10/13/16473542/ign-buys-humble-bundle.

Stevens, Colin. “Humble Store Now Sells Switch and 3DS Games.” IGN. IGN, January 7, 2019. Accessed May 15, 2020. https://www.ign.com/articles/2019/01/07/humble-store-now-sells-switch-and-3ds-games.

Wawro, Alex. “Gamasutra - Humble Bundle Is Now Funding Development of ...” Gamasutra, February 5, 2016. Accessed May 15, 2020. https://www.gamasutra.com/view/news/265279/Humble_Bundle_is_now_funding_development_of_Humble_Original_games.php.

India, Esports

Overview

India's esports sector is gradually ascending as a key player in the Asian esports market, with its market size reaching INR 3 billion (~£30 million) in FY2021 and projected to soar to INR 11 billion (~£100 million) by 2025, as reported by EY India (Gaming 2022). This growth is largely a byproduct of a mobile-first gaming ecosystem driven by an expanding Indian middle class, increasing access to Internet services, and a vast number of mobile phones. As reported by Newzoo in 2022, India's gaming industry stands as the world's second-largest in terms of player base, with 373 million gamers. 91% of this large gaming population plays games on their phones. The mobile gaming market has generated $2.2 billion in revenue by itself, making it a substantial revenue source (Newzoo 2022). Dominant esports franchises in India include *Battlegrounds Mobile India (BGMI)*, *Valorant*, and *Counter-Strike*. There are various eSports leagues and tournaments taking place across India. The prize pool for such tournaments is enormous which helps Indian esports to get internationally recognized.

History

The gaming scene in India started because of cyber cafes, where people pay by the hour for computers. These cafes served the Indian middle class, most of whom did not own personal computers, from the 1980s until the early 2000s (Seck 2019). The cafes were the cornerstone of spreading awareness about video games. These cafes were only the beginning of India's journey towards greater internet access and, with it, greater gaming opportunities. In 2010, Local LAN tournaments were organized by them were the initial endemic esports efforts. They were the first to correlate the idea of playing video games and competing for real or tangible rewards in India.

In 2012, the Indian Cyber Gaming Championship (ICGC), was a yearly national gaming event, for Indian gamers to showcase their talents. This was one of the biggest events as close to 10,000 gamers participated from 33 different cities in India (News 2012). For the first time, the event was broadcasted live, generating over 500,000 views and introducing cyber athletes to a wider audience. Later in 2014, NODWIN Gaming was established to grow the esports industry in India. They collaborated with several leagues to promote and broadcast esports, and organized events like the qualifying rounds for the 2014 Indian Electronic Sports World Cup (ESWC), which saw participation from over 250 teams (Liquipedia 2023). This made it possible for six Indian teams to compete in the ESWC championship match and greatly raised the popularity of titles like *CS:GO* in the Indian esports market.

Indian esports was growing and was getting recognized locally and internationally when in 2018 DreamHack Mumbai Invitational was announced. DreamHack provided exposure to Indian teams to compete with international teams played a crucial role. The exposure helped India when a US-based esports organization decided to establish in India, they created a *CS:GO* roster. The roster was selected to compete in the Asian Gaming Championship 2018 (Daunton 2022). This was a huge opportunity for the Indian gamers to show and test their skills in an international event. However, the administrators halted the game during a pivotal match. One of the Indian participants, Forsaken, was discovered to be hacking. The team was disqualified, which put

Optic Gaming in a precarious situation. As a result, Optic Gaming decided to leave India, and the team was disbanded. Nikhil Hathhiramani, Editor-in-Chief at CSGO2Asia, said “Almost immediately, everyone was allergic to that region and that scene” (Daunton 2022). This episode damaged the Indian esports scene's image and credibility of the community.

Current Landscape

The COVID-19 pandemic acted as a catalyst for the Indian esports industry, ushering in a new era of growth (Singhania 2021). As per the State of Indian Gaming Report, the number of eSports players in India was estimated to be over 600,000 as of 2022 (Padmanabhan 2023). These trends attracted several international esports organizations like Team SoloMid (in collaboration with Entity Gaming), Fnatic, Nova Esports (in partnership with Godlike), and Galaxy Racer, all of which began establishing operations in India (Gaming 2022). These teams' entry into the Indian market elevated the esports framework and propelled Indian players to new heights of popularity and followership, making them prominent figures for these global organizations.

BGMI, an India-specific version post-ban of the globally popular *PUBG Mobile*, has become a cornerstone of the Indian esports scene during this time (Saha 2024). Before its ban in India, *PUBG* accounted for a remarkable 24% (175 million) of the game's total global downloads, as of July 6, 2020, as indicated by Sensor Tower data (Selvaraj 2020). Prize pools for the *BGMI* series events; the *BGMI* Pro League, for example, has a prize pool of INR 1.5 crore, or over $200,000 (Chadha 2023). Prize pools like this not only attract more esports players but also show the stability and growth of esports in India.

PC gaming is gaining popularity, with Riot Games *Valorant* making significant progress in the region. This is highlighted by their partnerships with NODWIN Gaming for the *Valorant* Conquerors Championship, connecting to the global Valorant Champions Tour circuit. Riot Games acknowledges the talent and fanbase in India, as Sukamal Pegu, Esports Lead for India & South Asia at Riot Games, stated, "We're just getting started here in India with such international events" (Gaming 2023). Additionally, Skyesports introduction of India's first ever franchised *CS:GO* league in 2023 named Skyesports Masters represents a crucial development that diversifies India's esports offerings (Insider 2023). This rapid growth reflects India's increasing involvement with esports and highlights its potential to reshape the country's digital entertainment landscape.

Government Policies and Regulations

While the Indian government had policies related to curbing game addiction (Batra 2023), there were no explicit laws impacting the esports industry other than laws that were imposed on online gaming which requires no skills and relates to gambling (Batra 2023). It was only during 2020 when the Indian government's sweeping ban on Chinese apps affected the popular mobile esports around the Chinese Tencent-publish mobile game, particularly with the prohibition of *PlayerUnknown's Battlegrounds* (*PUBG*) (Mathur 2020). The *PUBG Mobile* ban left severe repercussions, affecting sponsorships as well as endemic and non-endemic investments. Many foreign esports companies were also affected by this circumstance, including Fnatic and Nova Esports, all of which had started setting up shop in India (Gaming 2022).

Since 2020, there have been significant changes in the governmental and regulatory environment surrounding esports. In late 2022, a groundbreaking step was taken with the amendment of the Allocation of Business Rules of 1961, officially recognizing esports as a competitive field within India (Now 2022). This momentous decision by the Ministry of Youth Affairs and Sports gives legitimacy to esports as part of the 'multisports events' category.

-S.A., JTerm 2024

References

Gaming, AFK. "How 2021 Shaped Indian Esports - Esports Insider." Esportsinsider, March 29, 2022. https://esportsinsider.com/2022/01/how-2021-shaped-indian-esports.

Seck, Tobias, Kevin Hitt, and Graham Ashton. "The Business of LAN Cafes in India." The Esports Observer | home of essential esports business news and insights. The Esports Observer, October 1, 2019. https://esportsobserver.com/lan-cafe-business-india/.

News, APN. "Indian Cyber Gaming Championship 2012 Takes Winners to the World Cup In ..." APN News, October 19, 2012. https://www.apnnews.com/indian-cyber-gaming-championship-2012-takes-winners-to-the-world-cup-in-paris/.

Daunton, Nichola. "One Map Away from Winning: 'How One Player Rocked Indian Esports.'" euronews, July 9, 2022. https://www.euronews.com/next/2022/07/09/one-map-away-from-winning-how-one-player-rocked-indian-esports.

Singhania, Jayesh. "Esports Industry: Opportunities, Challenges, and Growth Drivers." Medium, February 9, 2021. https://medium.com/unicornindia/esports-industry-opportunities-challenges-and-growth-drivers-3f4409695ee7.

Padmanabhan, Deepak Aravind. "The Rise of Esports in India: A Look at the Growing Popularity and Industry Developments ." Times of India Blog, July 3, 2023. https://timesofindia.indiatimes.com/blogs/voices/the-rise-of-esports-in-india-a-look-at-the-growing-popularity-and-industry-developments/.

Gaming, AFK. "Opinion: How Pubg Mobile's Ban Has Impacted Indian Esports - Esports Insider." Esportsinsider, March 29, 2022. https://esportsinsider.com/2020/10/opinion-how-pubg-mobiles-ban-has-impacted-indian-esports.

Saha, Soumyajit, and Pranav Mukul. "How Krafton Brought Pubg Successor Battlegrounds Back from a Ban." The Economic Times, January 11, 2024. https://economictimes.indiatimes.com/tech/technology/how-bgmi-avoided-battle-to-win-the-war/articleshow/106707729.cms?from=mdr.

Selvaraj, Jonathan. "End Game: What Does India's Pubg Ban Mean for Esports?" ESPN, September 2, 2020. https://www.espn.com/esports/story/_/id/29794117/end-game-does-indias-pubg-ban-mean-esports.

Chadha, Parth. "From Hobby to Career: How the Evolving Esports Industry Is Making Gaming a Viable Option for Aspiring Professionals in India." Times of India Blog, July 10, 2023. https://timesofindia.indiatimes.com/blogs/voices/from-hobby-to-career-how-the-evolving-esports-industry-is-making-gaming-a-viable-option-for-aspiring-professionals-in-india/.

Gaming, India Today. "Riot Games to Host 'Convergence', Its First Ever International Valorant Esports Tournament in India." India Today Gaming, November 22, 2023. https://www.indiatodaygaming.com/story/riot-games-to-host-convergence-its-first-ever-international-valorant-esports-tournament-in-india-3352.

Insider, Esports. “Esports around the World: India - Esports Insider.” Esportsinsider, June 9, 2023. https://esportsinsider.com/2023/06/esports-around-the-world-india.

Batra, Siddharth, and Chinmay Dubey. “Regulation of Esports in India.” SCC Blog, March 3, 2023. https://www.scconline.com/blog/post/2022/08/17/regulation-of-esports-in-india/.

Mathur, Abhimanyu. “Professional Players after Pubg Ban in India: Loss of Livelihood but Will Move on to Other Games - Times of India.” The Times of India, September 2, 2020. https://timesofindia.indiatimes.com/life-style/spotlight/professional-players-after-pubg-ban-in-india-loss-of-livelihood-but-will-move-on-to-other-games/articleshow/77894893.cms?from=mdr.

Now, Times. “Gamers Rejoice: Esports Now Officially Recognized as a Sport in India.” TimesNow, December 28, 2022. https://www.timesnownews.com/technology-science/gamers-rejoice-esports-now-officially-recognized-as-a-sport-in-india-article-96544645.

Newzoo. “Insights into Indian Mobile Gamers and How to Reach Them - Newzoo.” Newzoo, September 16, 2022. https://newzoo.com/resources/trend-reports/insights-into-indian-mobile-gamers-and-how-to-reach-them.

Liquipedia. “Electronic Sports World Cup 2014 Qualifier: India.” Liquipedia Counter-Strike Wiki, October 26, 2023. https://liquipedia.net/counterstrike/Electronic_Sports_World_Cup/2014/Qualifier/India.

India, National Video Game Industry

Indian Gaming at a Glance

The Indian gaming industry is reflective of the overall Indian economy: A sleeping giant, waiting for products that take advantage of its potential. In the last decade, the Indian video game market has grown exponentially, with mobile gaming being far and away the largest sector. In a country where smartphones and data are now becoming increasingly accessible, the growth of the Indian middle class is directly tied with the growing popularity of competitive gaming, eSports, and mobile gaming in the country with the world's largest youth population (India 2019). The industry currently has a worth of over $890 million (D'Cunha 2018), with projected growth into the billions (Wijman 2018). Mobile gaming has approximately 80% of market share, prompting more and more console and PC games to develop optimized content for mobile to cater to this growing giant sector of the overall gaming "pie" (KPMG 2019).

Humble Beginnings with Limited Penetration

The latest technology has historically been late to appear in India, and video games were no different, making their first appearances in the late 1980s, after the video game crash of 1983 (Alwani, 2015). Companies such as Columbus and Maze Marketing (now Mitashi) started by producing arcade machines and basic hand-held consoles, fighting extremely limited consumer awareness along the way. The absence of major gaming players such as Nintendo and Sega gave way to a phenomenon referred to as "low budget gaming," where local gaming companies would import Chinese-made consoles with their own logos, often preloaded with knock-off versions of popular games such as Mario (Alwani 2015). This practice grew when Sony began to sell its more sophisticated consoles, increasing the demand for a similar product at a lower price. Due to limited cultural acceptance in its early days of introduction, as well as the lack of disposable income in the Indian middle class to buy home gaming consoles lead to the majority of the video game enterprises founded during the early period to close their doors.

A cornerstone of the Indian gaming community are the LAN or cyber cafes, where the Indian public can go to pay by hour for usage of a computer, wi-fi connection, or printer services. In the 1980s through early 2000s, these cafes provided computer usage for the Indian middle class, the majority of which did not own their own PC (Seck 2019). These cafes played a key role in helping video games penetrate the Indian market, as now the majority of the public which did not have access to internet connection or wifi could play, often with other people in the cafes. These cafes were just the first step in making the internet, and thereby gaming, more accessible to India.

The Data Revolution, Mobile Gaming and Market Growth

Starting in 2010, Reliance Jio, a company owned by mogul Mukesh Ambani, began their project to install India's first all-4G network, investing $35 billion. By creating their own country-wide network, Jio dropped the price for data from around $3 per gigabyte to hardly 60 cents. The new, low price encouraged competitors to follow suit, making data prices at an all-time low, while also at the all-time high for availability and use. Since 2016, data usage has shot up by over 500%, with Reliance Jio alone having over 215 million subscribers (Purnell 2018). In 2019, about 40% of India's 1.4 billion person population has a smartphone of some kind, the large majority being Android phones (India 2019).

This extreme jump in data availability as well as mobile phone possession has shown direct correlation to Indian gaming habits. Mobile gaming has anywhere from 80-90 percent of the market share in gaming, with 50% of all smartphone users in India playing mobile games. This has resulted in India becoming one of the top five markets for mobile gaming. Categories like action, adventure, and real-money games (like poker or rummy) are gaining in popularity year over year (KPMG 2019).

Many game publishers are creating mobile-optimized versions of popular PC and console games, which have rapidly gained traction in the Indian market. In 2019, PUBG was the fifth most spent-on game in the Indian market, after four real-money spend games. In 2010, there were 25 video game companies founded in India - a number that has shot up to 275 in 2019. The market for Indian gaming has seen a 165% CAGR in app store downloads from 2016 to 2018, and with that number rising, companies like CreatioSoft and Octro have capitalized and made hit games such as Teen Patti, CreatioSoft solely creating games for the mobile platform (Loo 2020). Tencent, Google, and Amazon have all begun investing heavily in Indian start-ups (Rai 2019) as the increasing availability of internet access has increased business for all these. The Indian middle class continues to grow their disposable incomes, making PCs and consoles also more common in Indian households, but far less significant than mobile gaming.

India in the 2020s and Social Gaming

PUBG's popularity gave way to the growing popularity of games with a social aspect. Companies like Dream11 have capitalized on the interest in eSports and fantasy leagues, India experiencing 25x growth in fantasy sports users (KPMG 2019), as well as increasing interest in gaming tournaments and leagues. The cyber cafes that were once solely used out of necessity have foregone a transformation into full-fledged gaming cafes, with high-processing PCs and multiple consoles available to host eSports tournaments as well as matches in DOTA, PUBG, and more (Seck 2019). In 2016, 61% of Indian online gamers played DOTA (Suter 2016). These social games are also seeing growth in revenue, with money spent on these games projected to grow to as much as $2.4 billion in 2020 (Wijman 2018).

India has branched out, to host gaming expositions yearly as well as hold launch events for big games. The Indian Gaming Expo, or IGX, has been hosted over the last couple years, featuring many games and hosting tournaments for a grand prize of 3 lakh rupees, or about $4,000 USD. Games like Just Cause 3 hosted midnight launch parties at some of the biggest malls in India, inviting players to demo the games (Suter 2016). There were some of the first mobile eSports tournaments hosted in Bangalore, with over 100,000 attendees (Nair, 2020).

One of the largest issues that players in the Indian gaming market are facing now is monetisation. With mobile games being the lion's share of the market, the Freemium method is proving to be less effective, with only about 28% of mobile gamers being willing to make an in-app purchase to further their enjoyment of a game (KPMG 2019). Globally, revenue per paying consumer is far less in India than the average player, causing video game companies to exercise caution in asking for large in-app purchases (India 2019). Nonetheless, because of the sheer population size, in-app revenue has seen large growth over the last couple years. Data collected suggests that the drivers of growth in the new decade are going to be emerging markets such as that of India, and the increasing penetration of smartphone technology and internet data.

T.R., Spring 2020

References

Alwani, Rishi. "Tracing the Origins of Gaming in India: 8-Bit Cricket, Sega, and Cloning." NDTV Gadgets 360. Gadgets 360, March 20, 2015. https://gadgets.ndtv.com/games/features/tracing-the-origins-of-gaming-in-india-8-bit-cricket-sega-and-cloning-640129.

D'Cunha, Suparna Dutt. "How Digital Gaming In India Is Growing Up Into A Billion-Dollar Market." Forbes. Forbes Magazine, March 9, 2018. https://www.forbes.com/sites/suparnadutt/2018/03/09/how-online-gaming-in-india-is-growing-fast-into-a-billion-dollar-market/#bbd825c55b62.

India, DQ. "The Gaming Industry in India: A Boom Waiting to Happen." DQ India. DQ India, September 25, 2019. https://www.dqindia.com/gaming-industry-india-boom-waiting-happen/.

Loo. "Top 10 Gaming Companies in India." GuruGamer.com. GuruGamer.com, January 8, 2020. https://gurugamer.com/mobile-games/top-10-gaming-companies-in-india-8509.

Nair, Roopak. "Evolution of Gaming in India." Evolution of Gaming in India. siliconindia, 2020. https://education.siliconindia.com/viewpoint/evolution-of-gaming-in-india-nwid-11360.html.

Purnell, Newley. "Two Years Ago, India Lacked Fast, Cheap Internet-One Billionaire Changed All That." The Wall Street Journal. Dow Jones & Company, September 5, 2018. https://www.wsj.com/articles/two-years-ago-india-lacked-fast-cheap-internetone-billionaire-changed-all-that-1536159916.

Rai, Saritha. "Tencent Buys 10% of Policybazaar, Enters India Insurance Market." Livemint. LiveMint, November 9, 2019. https://www.livemint.com/companies/start-ups/tencent-buys-10-of-policybazaar-enters-india-insurance-market-11573273840323.html.

Seck, Tobias, Kevin Hitt, and Graham Ashton. "The Business of LAN Cafes in India." The Esports Observer | home of essential esports business news and insights. The Esports Observer, October 1, 2019. https://esportsobserver.com/lan-cafe-business-india/.

Suter, Amandeep, Dev Chinnappa, Apoorv Anupam, Shruti Jani, and Rohan Mathawan. "An Introduction To The Gaming Industry In India !" TechStory. TechStory, February 2, 2016. https://techstory.in/gaming-in-india/.

Wijman, Tom. "The India Opportunity: Tapping into One-Tenth of the World's Gamers." Newzoo. NewZoo, April 9, 2018. https://newzoo.com/insights/articles/the-india-opportunity-tapping-into-one-tenth-of-the-worlds-gamers/.

Wijman, Tom. "Newzoo's Trends to Watch in 2020 (Games, Esports and Mobile)." Newzoo. NewZoo, January 10, 2020. https://newzoo.com/insights/articles/newzoos-trends-to-watch-in-2020-games-esports-and-mobile/.

Influencers, Game Marketing

Overview

Gaming influencer marketing is a growing strategy by gaming companies to promote the use and adoption of their game using promotion deals with highly watched/followed streamers, gamers, and personalities. While the use of celebrities and famous individuals to promote products is not a new phenomenon, the growth of the internet and streaming has allowed for game advertising to not just center around commercials and flyers, but allow potential consumers to view gameplay through their favorite Youtubers, Twitch streamers, and others. Gaming influencer content spans multiple platforms with the most prominent being Twitch, Youtube, and Facebook/Instagram in the United States. Twitch stands as the most used platform for gaming marketing in the US with its platform being the most dedicated to gaming out of the three above and "comes out top when it comes to market share, representing 67% of hours streamed, compared to 22% for YouTube and 11% for Facebook" (Michaeloudis 2021). Gaming companies spend roughly 30% of their revenue on marketing each year with about two percent of that spend (roughly $827 million) going to influencer marketing (Malti 2019).

How It Works

Gaming influencer marketing involves 4 steps: researching the target audience, defining success metrics, choosing and recruiting the right influencer/personality which includes negotiation and contracting, and resulting metrics from the marketing campaign. For gaming companies to effectively hit their target audience and successfully choose the right influencers for their game, they first must research their needs. Common uses for gaming influencer marketing are campaigns upon the game's initial release that intend on building the game's player base/growing the game's popularity and campaigns during the game's useful life that are intended to extend the game's life through new users and audiences. Given whichever scenario the gaming company is in, the entity can research the appropriate target audience and with target audiences comes specific influencers that best fit those markets. After a target audience is decided, the gaming company must declare its success metrics and what the company hopes to achieve from the campaign. Success metrics differ depending on the campaign, but common metrics include game adoption spikes, ROI (money gained from campaign minus money spent on influencer), conversion rate or percentage of conversions driven by non-paid channels like social media and streaming platforms, and the K-factor (K = number of invites sent by each user/conversion rate of each invite) (Frid 2020).

Once companies have pinpointed their target audience and success metrics, influencer recruitment takes place that involves the identification of the influencers that best fit the campaign/company and negotiation of compensation packages for their time/effort. These partnerships between influencer and company often involve relationship building, a strategy to create long-term working relationships that help both parties with their goals. Lastly, once influencers are chosen and the campaign is run, the gaming company must collect the resulting data and compare the numbers to their earlier created success metrics to quantify if the campaign was successful. In doing this, the company can determine the need for their chosen influencers and the likelihood of the parties partnering again in the future.

Highest Earnings Gaming Influencers

Identifying the biggest gaming influencers is tricky due to the relative speed at which influencers and personalities gain popularity and subsequently lose fame and the vast genres of video games that exist, sectioning off influencers/gamers into their respective markets. However, by using annual income as a metric to bypass the diversity in gaming markets, the biggest influencers in gaming using 2019 income levels from Forbes include Ninja/Tyler Blevins ($17 million), PewDiePie ($15 million), Preston ($14 million), and Markiplier ($14 million) to name the top few on the list (Perez 2020). The ten names on the Forbes list pocketed more than $120 million in 2019 with most to almost all income not coming from competitions and esports, detailing how most of their income came from brand deals/sponsorships with companies, follower subscriptions, and merchandise.

Benefits

The common benefits of gaming influencer marketing include increasing brand awareness, building trust and authority with gamers and potential players, and creating partnerships with influencers that can be leveraged in the future. Brand awareness describes the degree of consumer recognition of a product/service by its name. With the thousands of video games released each year across multiple platforms, companies and brands must cut through the noise to be recognized and adopted into a gamer's everyday playing schedule. Gaming influencers stream/create content around a particular game and through their thousands to millions of followers on various platforms, a game becomes more recognizable, raising the likelihood of fans playing the game. Next, gaming influencers build trust in the game as their fans are more likely to believe a game is worthy of investing their time and money in versus a similar game from a competitor.

Long-term partnerships between influencers and game companies turn influencers into loyal brand advocates, streamlining campaign workflow and allowing for real-world performance testing. With gaming marketing campaigns taking time to go from idea to implementation, having existing, trusted influencers to promote games have shown to create quicker/better feedback loops on the game's fan reception and induce better quality projects/content from the influencer. Along with better content, game companies can use influencers for performance testing on their games to work out bugs or any ladened issues with the game that may not be resonating with fans, a difference from other forms of advertising that are difficult to get immediate feedback from.

Drawbacks

Drawbacks to gaming influencer marketing are the high costs, existence of fake followers, saturation of the market, and risks to reputation (Pfund 2019). Gaming influencer marketing costs vary based on the influencer and type of content being requested, but costs can range from mere hundreds of dollars for smaller personalities to thousands of dollars per post/piece of content for more popular influencers (*Influencer* 2022). Incurring this level of costs per influencer (disregarding even higher costs incurred from multiple influencer campaigns) makes the return on investment more difficult for a gaming company than other marketing forms and many influencer marketing campaigns serve as a loss leader so a company can seek future gains

through increased brand awareness and trust. Fake or bot accounts plague streaming and social media platforms, falsely boosting the amount of followers/engagement on an influencer's content. These fake accounts cannot be influenced by the content, meaning a game or brand partnering with an influencer that purchases fake followers will likely not obtain the return the company is looking for. Techniques like checking for an unusually high follower-to-engagement ratio, spikes in new followers, and generic comments that have little to do with the content are methods used by gaming companies to identify fake influencers (Pfund 2019).

The popularity of video games and content surrounding gaming has increased over the decades, making it harder for gaming companies and consumers to differentiate content. The number of Twitch streamers grew from 1,985 streams in September 2012 to 105,264 streams in January 2022 with a large portion of these streamers streaming gaming content (*Twitch* 2021). This growth alongside the growth of channels and accounts on Youtube and Facebook/Instagram makes the job of finding the right influencers for a brand even more difficult. Lastly, using gaming influencers for marketing and content puts the brand's reputation at risk as the brand becomes subconsciously linked to the influencer's lifestyle, opinions, and background (Bennett 2021). In cases of an influencer amassing public outrage, the brand's partnership/support of the influencer is viewed negatively, hurting the brand's image. With drawbacks like this, gaming influencer marketing must be conducted carefully and may prove to not be the best form of marketing for a gaming company.

-I.B., Spring 2022

References

Bennett, D. (2021, September 30). *Managing the risks of working with social media influencers*. Willis Towers Watson. Retrieved May 7, 2022, from https://www.wtwco.com/en-GB/Insights/2021/09/managing-the-risks-of-working-with-social-media-influencers?utm_source=slipcase&utm_medium=affiliate&utm_campaign=slipcase

Frid, I. (2020, May 13). *16 metrics gaming app marketers should measure*. AppsFlyer. Retrieved May 5, 2022, from https://www.appsflyer.com/blog/measurement-analytics/gaming-app-marketing-metrics/

Haryacha, P. (2021, July 31). *The key to video game marketing: Gaming influencers*. CloutBoost. Retrieved March 19, 2022, from https://www.cloutboost.com/blog/the-key-to-video-game-marketing-gaming-influencers

Influencer marketing costs (2022). Business of Apps. (2022, May 5). Retrieved May 7, 2022, from https://www.businessofapps.com/marketplace/influencer-marketing/research/influencer-marketing-costs/

Malti, M. (2019, May 20). *The impact of influencers on hyper-casual gaming*. Chief Marketer. Retrieved April 13, 2022, from https://www.chiefmarketer.com/the-impact-of-influencers-on-hyper-casual-gaming/

Michaeloudis, L. (2021, May 19). *Gaming influencers: A step-by-step campaign guide*. The Drum. Retrieved April 27, 2022, from https://www.thedrum.com/industryinsights/2021/05/19/gaming-influencers-step-step-campaign-guide

Perez, M. (2020, January 29). *Top-earning video gamers: The ten highest-paid players pocketed more than $120 million in 2019*. Forbes. Retrieved May 7, 2022, from https://www.forbes.com/sites/mattperez/2020/01/29/top-earning-video-gamers-the-ten-highest-paid-players-pocketed-more-than-120-million-in-2019/?sh=b7153d84880b

Pfund, C. (2019, December 17). *The Pros and Cons of Influencer Marketing for your Brand*. Forbes. Retrieved May 6, 2022, from https://www.forbes.com/sites/theyec/2019/12/17/the-pros-and-cons-of-influencer-marketing-for-your-brand/?sh=2b2454905ed0

Twitch Statistics & Charts. TwitchTracker. (2021). Retrieved May 7, 2022, from https://twitchtracker.com/statistics

Vicuña, X. (2020, December 9). *Choosing the right influencers: The metrics that matter*. Forbes. Retrieved May 6, 2022, from https://www.forbes.com/sites/forbesbusinesscouncil/2020/12/09/choosing-the-right-influencers-the-metrics-that-matter/?sh=635cc2db709a

In-Game Advertising

Overview

With the expansion of the video game industry, digital gaming has become a mainstream entertainment medium that engages every segmentation of socio-demographic groups. Consequently, video games have stood out to marketers and advertisers as a promising vehicle for integrating advertisements and reaching their target markets (Mackay et al. 2009). On a global basis, the use of video games as a channel to deliver advertisements, or *in-game advertising* (IGA) is expected to generate a revenue of US$14 billion by 2028, growing rapidly at a CAGR of 11.2% during the forecast period of 2021-2028 (ResearchDive 2022).

Defining In-Game Advertising

Scholarly conversation around in-game advertising continues to emerge throughout recent years, and yet related studies have displayed a slight divergence of opinions on the conceptual definition of in-game advertising.

IGA as real-life advertising analog
In one of the earliest IGA studies conducted by Nelson (2002), he suggested that in-game advertising is "a practice similar to product placement in movies and television shows". He has represented one common interpretation that the constitution of IGA is either (a) the inclusion of real-world advertising analog (e.g., billboards, poster ads and store signage) (Herrewijn and Poels 2014), or (b) the integration of branded products within the contextual gaming environment in the form of a background display or an interactive element intertwined with gameplay mechanics (e.g., cosmetics, equipment, branded characters and game plots) (Smith et al. 2014).

IGA as non-intrusive around game displays
Other studies on the other hand, demonstrated a propensity to define the term on a broader level, in which IGA is referred to as "any gesture of incorporating branding messages in existing games" (Chaney and Lin 2014). Aside from product placement and advertising material display, IGA in this interpretation has been identified as having five other major delivery elements: pop-up banners, rewarded videos, interstitials, offerwall and playable ads. The key to this definition is that the promotion of marketing messages in video games not only appears within the immersive playing environment of a game, but also around the game environment, as complementors before and after a game is played or when a game is loading, and not necessarily intrude into the gaming world itself (Smith et al. 2014).

Early Origins of Game Advertising: Advergames

The early 1980s had witnessed the emergence of the very first initiatives of combining video games and brand advertising, which is today known as the *Advergame. Advergame* implies a video game constructed around a brand or a product for the primary purpose of advertising and promotion (Smith et al. 2014; An and Stern 2011). The Atari VCS 2600 was one of the earliest pioneers in advergame production, bringing about various commercial releases through game

cartridges such as Johnston & Johnston's 'Tooth Protectors', Purina's 'Chase the Chuck Wagon', as well as the promotional Coca Cola's 'Pepsi Invaders', which was designed to be handed out to salespeople at their 1983 sales convention (Wolf 2012).

Static vs. Dynamic

In-game advertising per se made its debut in the sports game Micro Olympics in 1984. Simulating today's sports sponsorship banners, the names of other tech companies and brands of those days appeared on the sides of the athletic track in the 2-D game (Etermax BG 2020). This started the era of *static in-game advertising* (SIGA), where advertisements were planned and coded into a video game during its development stage with little chance for future altering or removal. Most SIGA takes the form of product placement, from McDonald's franchise into the virtual world of the Sims Online, to Tesla's new car model in the Game for Peace.

By contrast, *dynamic in-game advertising* (DIGA) echoes the benefits of most other web ads - geotargeting, demographic targeting, as well as high time sensitivity, meaning advertisers are allowed to react to changing trends and promote new products very quickly (Griffin and Fain 2009). Barack Obama's election campaign in 2008 could be an example of this category, where political messages were placed through billboards in games such as Guitar Hero III, Madden NFL 09 and NBA Live 08 to encourage people to vote for him. In addition, advertisement in this genre covers a wide range of ad formats including billboards, pop-up banners, interstitials, interactive product placement and more. Looking from a broader historical perspective, DIGA happened in the transformational stage of the game industry, when video games were no longer one-time sold products but evolved into a service.

The Rise of Mobile Gaming

With the advent of IPhone and the App Store in 2008, mobile games have been mushrooming rapidly and caused a paradigm shift in the video game industry. The Free to Play business model has become a new mainstream. In this context, in-game advertising now sits at the base of modern video game business, and is carefully designed with more visibility and a better reception possibility (Etermax BG 2020). Offerwall ads, for instance, provide a list of "offers" users can voluntarily choose to complete to get in-game rewards, through ad engagements like downloading another app.

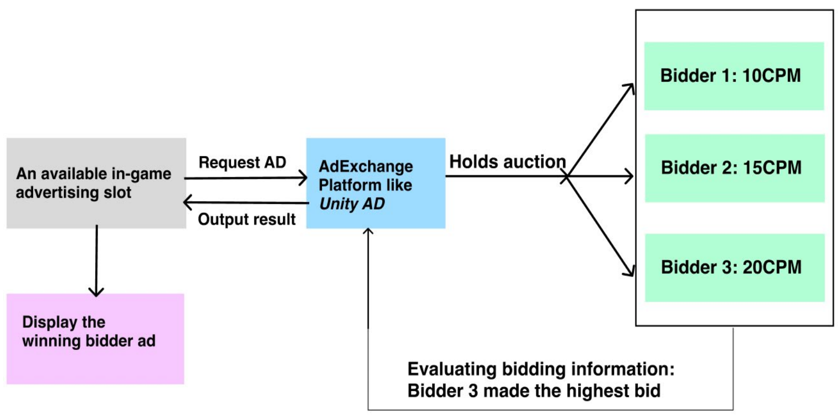
IGA as a Monetization Strategy

To avoid misunderstandings, the monetization strategy of IGA discussed in this section refers to the revenue mechanism of advertising within a game environment specifically taking forms of banners, rewarded videos, interstitials, offerwalls and playable ads.

In this era of digital transformation, the monetization of mobile advertising is no longer a process of inefficiency involving multiple parties negotiating deals and signing a guaranteed contract prior to placements. Instead, it is now facilitated through what we call the *Ad Exchange,* where advertisers may now purchase ad placements through spot markets for the real-time sale of online ad slots (Balseiro et al. 2014). In a generic ad exchange, publishers post an ad slot with a

reservation price, advertisers post bids, and an auction is run; this happens between the time a user visits a page and the ad is displayed (Muthukrishnan 2009).

Same rules hold true for the monetization of IGA. One prominent example of ad exchange in games is Unity Ads. With the incorporation of Unity Ads into an existing game, every time the game (the ad slot publisher) requests an ad, Unity Ads holds an open auction for advertisers to real-time bid on the game's impression performance, and the highest bidder gets to provide an ad (Unity n.d.). Earnings a game company could generate from IGA are calculated by multiplying the number of impressions an ad has achieved by the effective cost per thousand impressions (eCPM). While rewarded video ads and playable ads are reported to have the highest eCPM of any other ad formats, advertisers can also bid on different impression types to create a diverse source of revenue streams for game developers. For example, the bidding price might be relatively higher for a complete view of an ad and the action of clicking out to an external product link than simply triggering the ad (Unity n.d.).



The mechanics of Ad Exchange & Real-time Bidding

Conclusion

The appeal of IGA lies within the fact that integrating ads into digital games can provide brands with the opportunity to become an integral part of the digital game experience, reaching out to a favorable audience in a highly vivid entertainment environment (Nicovich 2010; Schneider and Cornwell 2005). More importantly, for game developers and publishers, integrating advertisements of all forms in games is a monetization strategy with massive cashability potential. When made good use of, IGA could also become one way to subsidize the rising development and marketing costs of their games without having to increase the retail price, which in turn benefits the gamer as end user (Chambers 2005). In the presence of ad exchange, the hint for game developers and publishers is clear: To yield optimization of advertisement display, mapping out the bid pricing strategy early and creating high-quality ads for better impression performance could be the crucial key.

-X.C., Summer 2022

References

An, Soontae, and Susannah Stern. "Mitigating the effects of advergames on children." *Journal of Advertising* 40, no. 1 (2011): 43-56.

Balseiro, Santiago R., Jon Feldman, Vahab Mirrokni, and Shan Muthukrishnan. "Yield optimization of display advertising with ad exchange." *Management Science* 60, no. 12 (2014): 2886-2907.

Chambers, Jason. "The sponsored avatar: Examining the present reality and future possibilites of advertising in digital games." (2005).

Chaney, Isabella M., Ku-Ho Lin, and James Chaney. "The effect of billboards within the gaming environment." *Journal of Interactive Advertising* 5, no. 1 (2004): 37-45.

Etermax BG. 2020. "In-Game Advertising: Four Decades of Innovation." Medium. November 4, 2020. https://medium.com/etermax-brand-gamification/in-game-advertising-four-decades-of-innovation-9a2b3f7c75c0#:~:text=F or%20many% 2C%20the%20fi rs t%20case.

Griffin, J., and J. Fain. "In-Game Advertising Measurement Guidelines Draft V6. 0." *Interactive Advertising Bureau* (2009).

Herrewijn, Laura, and Karolien Poels. "Recall and recognition of in-game advertising: the role of game control." *Frontiers in Psychology* 4 (2014): 1023.

Mackay, Thomas, Michael Ewing, Fiona Newton, and Lydia Windisch. "The effect of product placement in computer games on brand attitude and recall." *International Journal of Advertising* 28, no. 3 (2009): 423-438.

Muthukrishnan, Shanmugavelayutham. "Ad exchanges: Research issues." In *International workshop on internet and network economics*, pp. 1-12. Springer, Berlin, Heidelberg, 2009.

Nelson, Michelle R. "Recall of brand placements in computer/video games." *Journal of advertising research* 42, no. 2 (2002): 80-92.

Nicovich, Stefan G. "The effect of involvement on ad judgement in a computermediated environment: The mediating role of presence." *International Journal of Advertising* 29, no. 4 (2010): 597-620.

ResearchDive. 2022. ResearchDive. May 2022. "The Global In-Game Advertising Market Growth Opportunities, Analysis & Industry Forecast by 2022 to 2030." n.d. www.researchdive.com. https://www.researchdive.com/8527/in-game-advertising-market.

Schneider, Lars-Peter, and T. Bettina Cornwell. "Cashing in on crashes via brand placement in computer games: The effects of experience and flow on memory." *International Journal of Advertising* 24, no. 3 (2005): 321-343

Smith, Martin Williamson, Wei Sun, John Sutherland, and Bobby Mackie. "Game advertising: a conceptual framework and exploration of advertising prevalence." *Comput. Games J.* 3, no. 1 (2014): 95-124.

Unity. n.d. "Monetization Strategy." Unity Documentation. Accessed August 19, 2022. https://docs.unity.com/ads/MonetizationStrategy.html.

Wolf, Mark JP, ed. *Encyclopedia of Video Games: MZ*. Vol. 2. ABC-CLIO, 2012.

Insomniac Games

Overview

Insomniac Games is an American video game developer studio headquartered in Burbank, California (Moriarty 2012). Founded originally under the name Xtreme Software in 1994 by Ted Price, Insomniac Games was acquired by Japanese multinational conglomerate, Sony, in 2019, making it the 14th internal studio under the Sony Interactive Entertainment division (Sarkar 2019). Insomniac Games is known for developing games with story-driven plots, third-person gameplay, and creative in-game weapons and gadgets (Turi 2010). Their most commercially successful and critically acclaimed franchises include *Spyro*, *Ratchet and Clank*, *Resistance*, and *Marvel's Spider-Man*, which were all released in collaboration with Sony for the PlayStation consoles (Crecente 2019).

Going Multiplatform: Expanding Their Gaming Portfolio

Insomniac Games has enjoyed a relationship with Sony since its inception, with their first project, *Disruptor*, a sci-fi shooter game made for the first Playstation. Although financially a flop, *Disruptor* led to future collaborations with Sony: noticing Nintendo's dominance in the family gaming genre, Insomniac Games set out to create a family-friendly game for the PlayStation, as the console lacked one in its portfolio. Insomniac Games then released *Spyro the Dragon* in 1998, an open-world platformer featuring an anthropomorphic dragon. Following *Spyro the Dragon*'s success, Insomniac Games then released the sequel, *Spyro 2: Ripto's Rage!* in 1999 followed by *Spyro: Year of the Dragon* in 2000. In total, this trilogy has sold over 20 million units worldwide as of 2007 (Moriarty 2012). Insomniac Games went on to create their second successful franchise: *Ratchet & Clank* for the PlayStation 2, an action platformer with an emphasis on quirky gadgets and weapons. The series remains a strong piece in Insomniac Game's portfolio, as its latest installment to the franchise in 2016 was declared the "fastest-selling entry in the series" (Makuch 2016). Insomniac Games' third commercially successful franchise includes a sci-fi first-person shooter series, *Resistance*, for the PlayStation 3 (Moriarty 2012). The first game of the series, *Resistance: Fall of Man*, received a Platinum Entertainment and Leisure Software Publishers Association (ELSPA) Sales Award, signifying that *Fall of Man* sold more than 300,000 copies in the United Kingdom (ELSPA n.d.).

After 16 years of working exclusively with Sony, Insomniac Games began to actively diversify and expand their gaming portfolio in order to reach new audiences. In 2011, Insomniac Games partnered with EA Partners to develop a multiplatform game for Microsoft Studios' Xbox 360 console and the Playstation 3 (Grant 2010). This game became a four-player cooperative shooting game called *Fuse*, and ultimately Insomniac Games' lowest rated game in their portfolio (McWhertor 2014). However, learning from *Fuse*, Insomniac Games released the action-adventure shooter game *Sunset Overdrive* for Microsoft's Xbox One console in 2014, adhering to their brand of a "colorful, playful experience that's loaded with unusual, sometimes silly weapons" (McWhertor 2014). Consequently, *Sunset Overdrive* received commercial success and became the second best-selling game in the UK upon its release (Phillips 2014).

Additionally, in 2011 Insomniac Games created Insomniac Clicks, a social gaming division of the studio focusing on creating new intellectual property for the company (Fletcher 2011). According to Insomniac's Chief Creative Officer, Brian Hastings, going into the social sector of gaming was a natural and necessary step forward for the company, as "there is simply a bigger audience there" (MCV/Develop 2011). Through Insomniac Clicks, Insomniac Games created Outernauts, a colorful browser-based, free-to-play sci-fi game (Webster 2016).

Delving into Virtual Reality (VR) and Augmented Reality (AR)

With the release of HTC Vive and the Oculus Rift in 2016, Insomniac Games capitalized on these technologies and announced three titles for the Oculus Rift: third-person psychological thriller *Edge of Nowhere*, magic game *The Unspoken*, and puzzle and brawling game *Feral Rites* (Webster 2016). Similar to their motives for expanding into social gaming genres, Price stated, "We were really enamoured by the chance to get [into VR] early and develop an expertise in a field ahead of many of our peers who are maybe holding back and waiting to see what's going to happen" (Webster 2016). Although all three titles are extremely different in genre and gaming mechanics, what defines them as Insomniac Game titles is the "warmth that exists in our stories and our characters," said Price (Webster 2016). *The Unspoken* most notably takes advantage of the Oculus Rift capabilities, using the console's upcoming touch controllers and letting the player battle other wizards by casting spells with their hands (Webster 2016). In 2019, Insomniac Games added another game to their VR portfolio: *Stormland*, an open-world game that focuses on exploration. According to Mike Daly, a lead designer at Insomniac Games, *Stormland* addresses previous VR-related gaming nuances that they learned from their previous VR titles, such as accounting for people wandering in the VR environment and missing story elements that are embedded in certain spots, or honing in on the physicality of hand motion when playing the game, thus improving the general immersion aspect of the gameplay (Takahashi 2018).

However, according to 2019 Nielsen data, fewer than 6 million VR headsets were sold in 2019, barely more than in 2018; this is just a fraction of the millions of traditional gaming consoles sold each year. Additionally, the total amount of money invested in VR has dropped in recent years, proving that the VR industry may not be as lucrative as it was once projected to be (Paris and O'Dowd 2020). Still, Insomniac Games is optimistic about the future of VR, as Daly explains that Oculus is invested in the industry for the long term. Additionally, as more and more VR games are made available, consumers will begin to develop a desire for certain types of games that Insomniac Games are hoping to create. Finally, Daly believes there is room for improvement in VR hardware and software that could enhance the overall gaming experience (Takahashi 2018).

As of late 2019, Insomniac Games has also been working with Magic Leap's AR glasses, the Magic Leap One, to create an AR game called *Strangelets*, a sequel to their first AR game *Seedling*, which was released in 2018. While the objective of *Seedling* is to care for an alien plant, *Strangelets* invites players to search their homes for "dimensional rifts" in order to rescue alien creatures (Baker 2019).

Sony Acquisition and the Future of Insomniac Games

Coming off its most successful game ever, the PlayStation 4-exclusive *Marvel's Spider-Man* in 2018, Insomniac Games was acquired by Sony for $229 million (Gilliam 2020). According to Price, this partnership only "amplifies [Insomniac Games'] potential, and *Marvel's Spider-Man* was a testament to this," the acclaimed action game having sold more than 13.2 million copies worldwide as of July 2019 (Gilliam 2020).

Regarding the future of Insomniac Games, *Marvel's Spider-Man* demonstrates Insomniac Games' ability to adapt to different genres of gameplay: not only did Insomniac Games honor Marvel's original Spider-Man narrative, but they were also able to incorporate hand-to-hand combat into the game despite having an expertise in shooter games and mechanics (Fischer 2018). Proving to have a diverse range of game developing skills in addition to now possessing access to Sony's resources, Insomniac Games can continue to experiment with new gaming technologies and deliver new experiences to gamers.

-M.K., Spring 2020

References

"ELSPA Sales Awards: Platinum." 2020. ELSPA. ELSPA. Accessed May 15. https://web.archive.org/web/20090515224703/http://www.elspa.com/?i=3944.

"Interview: Insomniac Click." 2011. MCV/Develop. MCV/Develop. March 18. https://www.mcvuk.com/business-news/mobile/interview-insomniac-click/.

Baker, Harry. 2019. "Insomniac Launches Strangelets for Magic Leap One." VentureBeat. November 30. https://venturebeat.com/2019/11/30/insomniac-launches-strangelets-for-magic-leap-one/.

Crecente, Brian. 2019. "Insomniac Games: From Purple Dragon to Incredible Spidey." Variety. February 28. https://variety.com/2019/gaming/features/insomniac-games-from-purple-dragon-to-incredible-spidey-1203152358/.

Fischer, Tyler. 2018. "Insomniac Reveals One of the Biggest Challenges of Spider-Man PS4's Development". ComicBook. August 11. https://comicbook.com/gaming/news/spider-man-ps4-biggest-challenge/.

Fletcher, JC. 2011. "Interview: Click here to learn more about Insomniac Click." Engadget. Verizon Media. March 13. https://www.engadget.com/2011-03-13-interview-insomniac-click.html.

Gilliam, Ryan. 2020. "Sony purchased Insomniac Games for $229M." Polygon. February 10. https://www.polygon.com/2020/2/10/21131899/sony-purchase-acquisition-insomniac-games-2019-2020-spider-man-sunset-overdrive-ratchet-clank.

Grant, Christopher. 2010. "Interview: Insomniac Games' Ted Price on going multiplatform, EA Partners." Engadget. Verizon Media. May 25. https://www.engadget.com/2010-05-25-interview-insomniac-games-ted-price-on-going-multiplatform-ea.html.

Makuch, Eddie. 2016. "Ratchet & Clank PS4 Breaks Franchise Sales Record." GameSpot. April 29. https://www.gamespot.com/articles/ratchet-and-clank-ps4-breaks-franchise-sales-recor/1100-6439357/.

McWhertor, Michael. 2014. "How Insomniac learned from Fuse and got its groove back with Sunset Overdrive." Polygon. Polygon. May 8. https://www.polygon.com/2014/5/8/5684982/sunset-overdrive-fuse-insomniac-games.

Moriarty, Colin. 2012. "Always Independent: The Story of Insomniac Games." IGN. September 28. https://www.ign.com/articles/2012/09/28/always-independent-the-story-of-insomniac-games.

Paris, Francesca and Peter O'Dowd. 2020. "A Strange New World: Has Virtual Reality Gaming Lived Up To Its Promise?" WBUR. February 24. https://www.wbur.org/hereandnow/2020/02/24/virtual-reality-orion-13-games.

Phillips, Tom. 2014. "Sunset Overdrive debuts second in UK chart." Eurogamer. Gamer Network. November 3. https://www.eurogamer.net/articles/2014-11-03-sunset-overdrive-debuts-second-in-uk-chart.

Sarkar, Samit. 2019. "Sony to Acquire Insomniac Games." Polygon. Polygon. August 19. https://www.polygon.com/2019/8/19/20812654/sony-buys-insomniac-games.

Takahashi, Dean. 2018. "Why Insomniac is making its fourth virtual reality game." VentureBeat. September 26. https://venturebeat.com/2018/09/26/why-insomniac-is-giving-vr-a-try-again-with-its-fourth-game/.

Turi, Tim. 2010. "Interview: Ted Price Talks Resistance 3, Going Multiplatform." Game Informer. October 25. https://www.gameinformer.com/games/resistance_3/b/ps3/archive/2010/10/25/interview-ted-price-talks-resistance-3-juggling-genres-and-goIng-multiplatform.aspx.

Webster, Andrew. 2016. "Why Insomniac Games is betting big on virtual reality." The Verge. April 18. https://www.theverge.com/2016/4/18/11450588/insomniac-games-Virtual-reality-oculus-rift

Italy, National Video Game Industry

Italian Gaming Snapshot

The success and global recognition of the modern day Italian gaming industry is a reflection of the efforts of a small number of game developers and Italian gaming organizations. Currently there are twelve main game development companies that have catalyzed and proliferated the "Made in Italy" brand and allowed the global gaming industry to see the Italian market as a competitor. Italian gaming owes its prominence to: Artematica (1996), Milestone S. r. L. (1996), Ovosonic (2012), 34BigThings (2013), Forge Play (2011), Storm in a Teacup (2013), MixedBag (2011), Tiny Bull Studios (2011), and Lunar Great Wall Studios (2016) (these companies mainly produce for Sony PlayStation consoles and PC). It is due to these aforementioned companies that the Italian video gaming industry saw revenue of € 1.8 billion in 2018. Thus making them the fourth largest market in Western Europe, and tenth largest market in the world (NewZoo, 2018). However the majority of these companies were founded within the last ten years, which explains the relatively small size of the Italian market. Alternatively, the Italian market owes its relatively late domestic and global entry into the gaming industry, to its controversial beginnings.

Videogiochi (Video Games): Humble yet Controversial Beginnings

To actually trace the history of the Italian gaming, one must start with when modern technology became available to the Italian populis. The introduction of the computer in Italian society dates back to 1965. Its name was Programma 101 and was the world's first desktop computer (Gandolfi, 2015), developed and promoted by Italian company Olivetti. They dominated the computer culture scene from the 1960s to the 1980s. These machines are especially important because they gave rise to the use of them as gaming machines, and as a result gave rise to pc gaming culture as well.

Given the quasi-renaissance that was happening throughout the country, new means of entertainment were on the rise, thus marking the beginning of the Italian video games industry which is a very interesting and complex market that dates all way way back to 1974. In 1974 Italy produced the Ping-O-Tronic, one of the earliest consoles by Zanussi (like many early video game companies, Zanussi was a furniture company at the time of Ping-O-Tronic's release). Ping-O-Tronic was licensed to run the official version of Atari's 1972 version of PONG (Gandolfi, 2015). This is what most consider the catalyst of arcade culture in Italy.

*Pirateria e Furti in Italia (***Piracy and Theft in Italy***)*: The Bertolino-Sidam Sentence

This exciting addition was short lived due to Italian developers' involvement in pirating schemes. Sidam was a company based in Turin, Italy, and before their entry into the video games market they were in the fussball business. But between the years of 1978 and 1984, Sidam began

cloning Atari games such as: *Avalanche* (1978)*, Asteroids* (1979) and *Centipede* (1980), etc. They were able to do this because in 1972, Atari had an exclusive distributor in Bertolino, Italy, thus giving Sidam access to the Atari content. As a result, the Italian courts system found Sidam guilty for their cloning of Atari's games.

This is an important legal decision not just in Italian video game ecology, but in Italian law in general. This case establishes the fact that video games are intellectual property. It is important to note that this establishes legal precedent, but no regulations came from this case. Most would think that after the intellectual property precedent was set, the pirating market would cease to exist. But given Italy's relations with the Mob and its tumultuous relationship with bootlegging and gambling throughout the country, this practice of game cloning would persist.

L'Economica D'Italia Videogiochi **(The Economics of the Italian Videos Games): Trends in The New Millenium**

After the "Bertolino-Sidam sentence," which is the colloquial name the aforementioned legal proceedings, the video gaming industry mimicked its reconstructionist positionality of the 1970s and tried cleaning up its pirating past. Born out of this new stance on gaming, Simulmondo, Italy's the first software house was created in 1987. In the twelve short years the house was in business, it released 150 games on various platforms (Commodore 64, PC and Gameboy, etc.) (Gandolfi, 2015), under the direction of one of Italy's most prominent figures in the gaming industry, Francesco Carla. Some titles include F1 Manager [1989], Time Runners [1993],Tex [1993] and Dylan Dog: Attraverso lo specchio [1992] (Gandolfi, 2015). As Simulmondo was nearing its end, in 1996 Milestone S. r. L. was established under the direction Antonio Farina (originally founded under the named Graffiti). Throughout the years Milestone S. r. L. started gaining traction which allowed them to partner with Virgin, EA Sports, and Capcom. By 2002 they were incorporated into Leader Group, who is the quintessential publishing company in Italy.

Associazione Editori Sviluppatori Videogiochi Italiani (AESVI) (association of Italian video game developers), a local interactive software association under the Interactive Software Federation of Europe, was founded in 2001. AESVI seeks to represent publishers, console producers, and video game developers in Italy. The Association was established with the goal of representing, promoting and protecting the collective interests of the sector. Toward the end of 2003 the three major video game hardware manufacturers joined the Association: Sony Computer Entertainment, Nintendo and Microsoft. Additionally they release reports about the scale and finances of the industry. However, in 2012 AESVI released their first report and their findings are quite shocking given the momentum the Italian gaming industry had end at the turn of the century.

> "...more than a third (37%) of the seventy-two Italian companies interviewed active in game development employ only one or two people. More than a quarter (27%) show annual revenues under 1,000 euros, 12% made between 1,000 and

10,000 euros, 27% from 10,000 to 100,000 euros, 27% from 100,000 to 1 million euros, and only 7% crossed the six-zero sum (AESVI, 2012a). The entire sector employs almost one thousand people, even if their efforts are often rhapsodic: according to the AESVI report, the majority of companies (62%) were established in the last three years, and 90% are mostly self-financed; only 21% have some contact with publishers, and 16% have a holding company."

Given the relatively small size of the market in Italy, they have really made a lot of headway with becoming a strong economic force in europe and globally. In 2012, they were considered the 4th largest market in Europe, with a total income of € 993.1 million. The console sector brought in revenues upward of € 393.6 million, and the software sector brought in € 599.5 million (AESVI, 2012).

Fast forward 5 years later, the Italian video games industry has grown exponentially. In fact, GameIndustry.biz released an article in 2018 with the headline "Italian games market hits $1.8 billion in 2017". Their source of information comes from the newest AESVI reports, which state : "€1.05 billion was made from video game software, with a further €428 million from hardware and accessories" (Dring, 2018). That growth is absolutely amazing, especially considering that the Italian game market seemed as though it hit its peak long before the 1990s. However, with the rise of creative studios like Milestone S. r. L., Italian gaming has seen a massive resurgence and the size of said market continues to grow every year. Especially with the creation of Milan Games Week (MGW) in 2011. MGW, is the largest Italian consumer show dedicated to the gaming world, promoted by AESVI (MilanGamesWeek.it, 2019). After all, GameIndustry.biz released an article which tauts the fact that in 2018, MGW had almost 150,000 visitors and the numbers continue to grow (Handrahan, 2018). Given the current success of Italy's gaming industry, many hope there's no reversion to the pirating that poisoned their humble beginnings.

-G.B., Spring 2019

References

AESVI . 2012a . 1 ° Censimento dei game developer Italiani. Accessed May 08, 2019. http://www.aesvi.it/cms/download.php?attach_pk=1411&dir_pk=902&cms_pk=1929

AESVI . 2012b . Rapporto annuale sullo stato dell ' industria videoludica in Italia 2011.Accessed May 08, 2019. http://danielelepido.blog.ilsole24ore.com/i-bastioni-di-orione/files/aesvi_rapporto-2011.pdf

Associazione Editori Sviluppatori Videogiochi Italiani. "L'ASSOCIAZIONE." Profilo - Www.aesvi.it. 2005. Accessed May 08, 2019. http://www.aesvi.it/cms/index.php?dir_pk=101.

BSA (Business Software Alliance) . 2012 . Shadow market of pirated software grows to $63 billion. Accessed May 08, 2019. http://globalstudy.bsa.org/2011/

Dring, Christopher. "Italian Games Market Hits $1.8 Billion in 2017." GamesIndustry.biz. April 20, 2018. Accessed May 08, 2019. https://www.gamesindustry.biz/articles/2018-04-20-Italian-games-market-hit-usd1-8-billion-in-2017.

Handrahan, Matthew, “To Build a Future, Italy's Games Industry Must Reckon With its Past.”GamesIndustry.biz. January 19th, 2018. Accessed May 08, 2019. https://www.gamesindustry.biz/articles/2018-01-19-to-build-a-future-italys-games-industry-must-reckon-with-its-past

Gandolfi, Enrico, and Mark J. Wolf. "Italy." In *Video Games Around the World.*, 305-18. Cambridge: MIT Press, 2015. Accessed May 08, 2019. ProQuest Ebook Central

NewZoo. 2018 . 2018 Country Summary Report: Italy. Accessed May 08, 2019. http://www.newzoo.com/wp-content/uploads/Italy_summary_deck_new1.pdf

USTR . 2013 . 2013 Special 301 Report. Office of the United States Trade Representative. Accessed May 08, 2019. http://www.ustr.gov/about-us/press-office/reports-and-publications/2013/2013-special-301-report

Itch.io

Overview

Itch.io, is a burgeoning open source video game marketplace and distribution platform with the mission to be "for the developers, we love," displayed on their GitHub, a website for developers to upload and share code.

Itch.io was released in 2013 by Leaf Corcoran with a 'pay what you want' model and an independent developer focus, allowing any developer to release their game on the platform (Corcoran 2013). At the time, the leading PC video game distribution platform, Steam, strictly curated the games released on their platform. Micro or individual developers were forced to utilize their grassroots system Greenlight, which relied on community upvotes for potential publishing on their platform and a listing fee of $100 USD (Grayson 2016).

Corcoran developed Itch.io in a scripting language he created, MoonScript, and his web-powered framework Lapis. The site was built from the ground up to optimize itch.io for asynchronous support for HTTP requests and his database, allowing for quick game uploads/downloads and browser play (Corcoran 2013). Itch.io's independent, personal, and open development, alongside its use of the .io domain, which in computer programming stands for input/output, separated them from commercial distribution platforms.

Functions of itch.io

The absence of advertised material on the site by third parties or itself limits the displayed information and content to sole developers'. Video game developers on itch.io have access to an array of tools, customizable game homepage options, and developer blogs. These options allow developers to display their content in custom ways through the use of background images, videos and HTML customization as seen in Figure 1 and Figure 2.

Tools like itch.io's customizable widget allow developers to embed itch.io features such as paying, downloading and playing, on any website. Their Refinery tool, allows developers to upload games in early access stage and get reports on bugs and crashes within their games to inform development. Integrated support for crowdfunding websites Indiegogo, Kickstarter and Patreon let developers directly reward their financial support base with unique rewards or games and restrict access to offline or online play to only these supporters' respective crowdfunding account. These limited access rewards or games can also be instituted on itch.io itself, with a range of content on a game's page unlocked at differing price tiers. These tools and integrations utilize itch.io's butler tool that can update games with new content manually or through automation. These tools give developers full control over their game's distribution, with multiple

independent distribution iterations available at any given time. These tools are all open source, giving developers the ability to submit fixes or new features. Features are implemented with developer interests at the core of their creation, many of these tools were created in response to issues or requests by developers themselves (Sinclair 2017, Smith 2014).

One core feature of itch.io is its game jam system. Game jams are time restricted video game development competitions or exercises. After the removal of the popular mobile game *Flappy Bird* (Nguyen 2013) from the iOS app store, itch.io community members held Flappy Jam in February of 2014; a game jam centered around Flappy Bird akin games that had 732 submissions available to play across Android, iOS, Linux and browser. Prominent developers Terry Cavanaugh, creator of *Super Hexagon* (2012) and *VVVVVV* (2010), and Adam Saltsman, creator of *Canabalt* (2009), participated in the event, creating widespread media attention (Kumparak 2013).

Figure 1: Screen capture of *MoonQuest*'s Current itch.io page. Game was developed by Ben Porter.

Figure 2: Screen Capture of *Planetarium*'s current itch.io page. Game was developed by Daniel Linssen.

Itch.io Today

Following the success of Flappy Jam, itch.io gained increasing popularity with developers (Figure 3). The number of games uploaded per month rose and so did their monthly payout to developers (Figure 4). In 2015 itch.io's library had grown to 15,453 games, 44% accepted payments and of those, 10% had a minimum price; overall 89% of games were available to be played for free (Corcoran 2015). With developer payout totaling $393,000 in 2015 and their monthly uploaded content, daily users and expenses growing, itch.io made an unexpected change to their revenue share. In 2015, itch.io announced open revenue sharing for developers. Previously itch.io had a flat cut of 10% but, with this announcement they gave developers control of how they wanted to split revenue. Few developers exploited this system by giving itch.io 0%, the average transaction gave 8% of revenue (Figure 5, Figure 6).

As of 2018, SimilarWeb, a website analytics company, ranks itch.io as the 2,674 most visited website globally and the 1,331 most visited website in the United States. With over 143,000

games now available on the itch.io, bringing 15 million visits per month, compared to 435,000 in January 2014 (Corcoran Twitter). The rise in attention has incited a number of events that abuse itch.io's open distribution; in 2017 reports of pirated games on itch.io began to circulate (Wales 2017). Users who bought these games were either downloading a DRM, Digital Rights Management, free version and were able to play, or were scammed and received no game at all. Itch.io responded to this by changing their payment methods, requiring sellers to connect their PayPal or Stripe account, which has to be older than 3 months, to their itch.io account. To receive direct payment, developers need to provide tax identity information (Corcoran 2018). For itch.io developers, whose games had been pirated and reuploaded, itch.io developed a new API, OAuth, that checks whether players purchased the downloaded game.

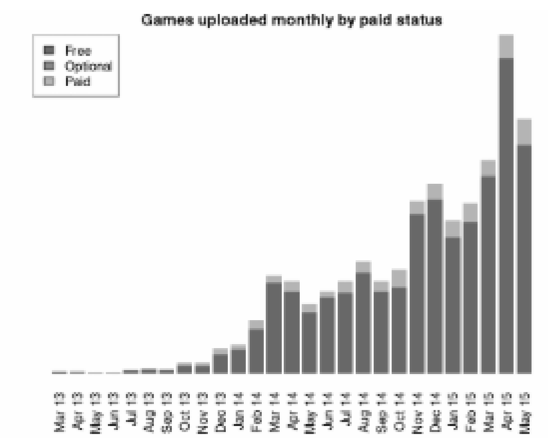


Figure 3: Graph from Corcoran "Running An Indie Game Store 2015" blog post.

Figure 4: Graph from Corcoran "Running an Indie Game Store 2015" blog post.

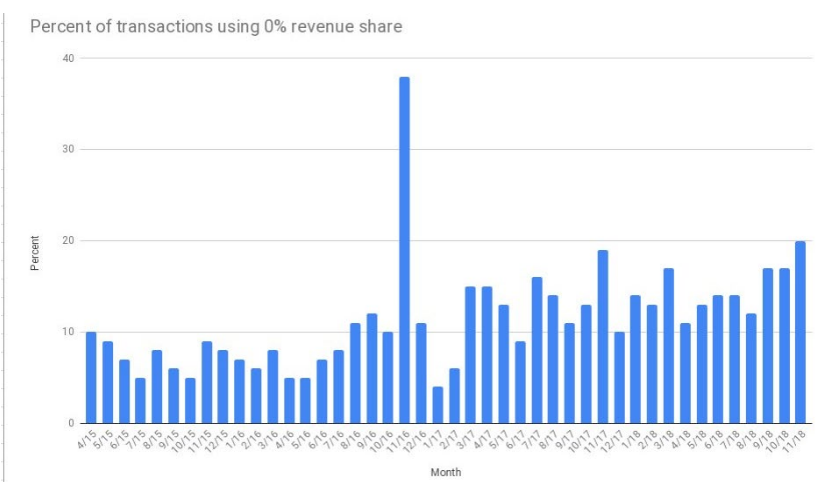


Figure 5: Graph from Corcoran's Twitter, @moonscript.

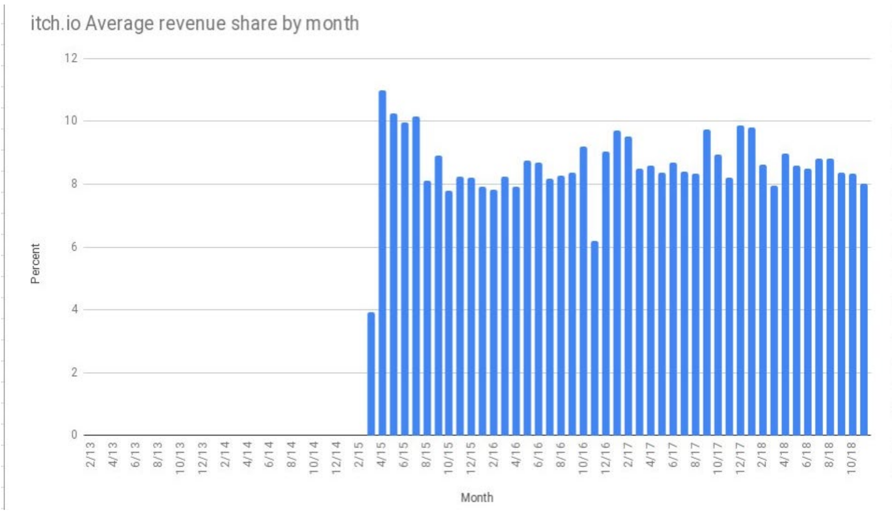


Figure 6: Graph from Corcoran's Twitter, @moonscript.

Distribution Dogma

Steam recently announced a new revenue share policy for games: 70/30 games with less than $5 million in sales, 70/25 for games with over $10 million in sales and 80/20 for games with over $50 million in sales(Valentine 2018). Although Steam currently accepts everything "except for things that we decide are illegal, or straight up trolling," with a $100 listing fee, their acceptance of marginalized communities still limits their platforms accessibility (Johnson 18). Itch.io doesn't enact subjective prejudice towards the games they allow on their platform, it is open for all developers. Developers share their revenue with itch.io by choice, 30% of purchasers pay extra and itch.io continually evolves their platform for the community (Figure 6, Corcoran 2015).

-J.P., Fall 2018

References

Corcoran, Leaf. "Introducing Itch.io." Leafo.net. March 23, 2013. Accessed December 10, 2018. ….http://leafo.net/posts/introducing_itchio.html.

Corcoran, Leaf. "January 2014 Itch.io Stats." Twitter. February 04, 2014. Accessed December 10, 2018. https://twitter.com/moonscript/status/430836212673167360.

Corcoran, Leaf. "Running an Indie Game Store 2015." Itch.io. June 20, 2015. Accessed December 10, 2018. https://itch.io/blog/2/running-an-indie-game-store-2015.

Corcoran, Leaf. "Percent of Transactions Using 0% Revenue Share." Chart. Twitter. November 27, 2018. Accessed December 10, 2018. https://twitter.com/moonscript/status/1067491378689564672.

Corcoran, Leaf. "Itch.io Average Revenue Share by Month." Chart. Twitter. November 27, 2018. Accessed December 10, 2018. https://twitter.com/moonscript/status/1067489165116198912.

Corcoran, Leaf. "Updates to Itch.io Seller Accounts, Payouts, & Tax Interview." Itch.io. June 26, 2018. Accessed December 10, 2018. https://itch.io/updates/updates-to-itchio-seller-accounts-payouts-tax-interview.

Grayson, Nathan. "Inside The Murky Process Of Getting Games On Steam." Kotaku. November 28, 2018. Accessed December 10, 2018. https://kotaku.com/inside-the-murky-process-of-getting-games-on-steam-1764091520.

Johnson, Erik. "Steam Blog :: Who Gets To Be On The Steam Store?" Steam Community. June ….06, 2018. Accessed December 10, 2018. https://steamcommunity.com/games/593110/announcements/detail/1666776116200553082.

Linssen, Daniel. "Planetarium." Itch.io. May 20, 2015. Accessed December 10, 2018. https://managore.itch.io/planetarium.

MoonQuest. Adapt. Ben Porter. Itch.io. July 13, 2018. Accessed December 10, 2018. https://eigenbom.itch.io/moonquest.

Valentine, Rebekah. "Indie Developers Are Unhappy with Steam's New Revenue Sharing Tiers." GamesIndustry.biz. December 3, 2018. Accessed December 10, 2018. https://www.gamesindustry.biz/articles/2018-12-03-indie-developers-are-unhappy-with-steam….s-new-revenue-sharing-tiers.

Wales, Matt. "UPDATED: Fake Copies of Popular Indie Games Are Being Sold on Itch.io." Kotaku UK. July 12, 2017. Accessed December 10, 2018. ….http://www.kotaku.co.uk/2017/07/12/fraudelent-sellers-are-flogging-fake-copies-of-popular-i….ndie-games-on-itch-io.